REPORT

ON THE

ADMINISTRATION

OF THE

PUNJAB AND ITS DEPENDENCIES

FOR

1917-18.

Lahore:
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FROM

THE HON'BLE MR. J. P. THOMPSON, I.C.S.,

Chief Secretary to Government,
Punjab and its Dependencies,

To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
FOREIGN AND POLITICAL DEPARTMENT.

Dated Lahore, 28th March 1919.

SIR,

IN continuation of this Government's letter No. 4160-Genl. of 13th February 1919, and in reply to your telegram No. 491-G. of 17th February and Dr. Rushbrook Williams' demi-official letter No. 1044-C. of 10th February 1919, I am directed to submit a paragraph revised up to the end of 1918 on the War and also a supplementary paragraph on the outbreak of influenza for incorporation in the General Summary for the Indian Administration Report at the end of the paragraph on "Condition of the People."

I have the honour to be,

SIR,

Your most obedient servant,

J. P. THOMPSON,

Chief Secretary to Government, Punjab.

PUNJAB.

Lieutenant-Governor,

SIR M. F. O'DWYER, G.C.I.E., K.C.S.I.

The War.—In a Province which has alwasy been noted for its martial traditions the war naturally continued throughout the year* to form the most serious pre-occupation of the administration. In July 1917, in response to the call for a more effective organization of the man-power and resources of India, a Provincial Recruiting Board was formed, consisting of a number of experienced Civil and Military Officers and non-officials all of whom had practical experience of the problems with which they were called upon to deal. The Lieutenant-Governor, who had been appointed a member of the Central Recruiting Board, himself assumed the presidentship of the Provincial Board which met regularly until the cessation of hostilities, and rendered the greatest assistance to Government in all matters connected with recruiting. A vigorous campaign was initiated in all districts with a view to attracting to the Army classes of military value, and a series of Recruiting Darbars was held by the Lieutenant-Governor at which the apathetic were aroused to their duty and the active were stimulated to further effort by commendation and the judicious distribution of rewards in the form of land, khillats, titles and other distinctions. That the policy thus pursued has been amply justified by results may be gathered from the figures quoted by the Lieutenant-Governor in his speech to the Provincial Legislative Council in April 1918 when he recalled to

* "The yea " throughout this chapter means the latest annual period for which departmental reports are available (*e.g.*, calendar year 1917 or financial year ending 31st March 1918, etc.) It is in every case the annual period subsequent to that on which the report of the year 1916-17 was based. This is necessary for the purpose of comparison. Where information up to the end of the calendar year 1918 is given, this is distinctly stated so as not to vitiate comparisons.

the members the resolution which the Council had passed soon after the outbreak of war humbly assuring the King-Emperor of the determination of the people of the Province to serve His Majesty in every form in which their help might be required against the enemies of the Empire. Whereas during the first $2\frac{1}{2}$ years of the war the Punjab furnished 124,000 men to the Indian Army, during the year 1917-18 it raised over 127,000 to fight the battles of the Empire. All the rest of India, including the Native States, with more than 12 times the Province's population, raised in the same period 137,000. In addition to these combatants some 60,000 or 70,000 Punjabis were enlisted as non-combatants, followers, &c.

The Punjab was well represented at the conference which was summoned to Delhi by His Excellency the Viceroy at the end of April 1918, in response to the solemn and urgent message of the Premier of Great Britain, to concert further measures of help to the Empire in the final effort of the war which has since terminated so gloriously. Subsequently the Lieutenant-Governor called a Provincial Conference at Lahore on the 4th May 1918. At that meeting the resolutions passed assured His Majesty the King-Emperor of a loyal, prompt and practical response to the august message received from him; pledged the Province to contribute within 12 months 200,000 additional men to the army, of whom 180,000 would be combatants; proposed to raise 2,000 young men of the educated classes for the Indian section of the Indian Defence Force, and expressed a determination to raise a war loan eclipsing the previous one and develop to the utmost the local resources of the Province.

To carry on propaganda work the Punjab Publicity Committee was formed at Lahore, with a local branch in each district. All the well known methods of publicity were placed under contribution and the central committee issued a most successful weekly paper *Haq* (The Right) in English, Urdu and Gurmukhi (the two chief vernaculars of the Province) which attained a very large circulation.

The success of the intensified recruiting campaign is proved by the fact that by the close of the war the numbers of men estimated to have joined the army during the war as combatants and non-combatants were 375,000, of whom four-fifths belonged to the former category. How well the soldiers of the Province have borne themselves in action has been proved by the fact that they won up to the end of hostilities on the Western fronts no less than 1,905 distinctions for gallantry in the field, including 4 Victoria Crosses and 24 Military Crosses, besides 141 Foreign Orders and Medals. In these honours the troops of the Ruling Princes and Chiefs of Patiala, Jind, Bahawalpur, Kapurthala, Faridkot, Maler Kotla and Chamba, who came forward with practical and generous offers, usually to double their existing contributions of fighting men, had their full share; and it was with peculiar pride and pleasure that the people of the Province learned of the selection of His Highness the Maharaja of Patiala to represent the Princes of India in the Imperial War Conference. The honour was welcomed as a just recognition of the part played by the premier Punjab State and the Punjab generally in the great conflict.

It cannot be disguised that the burden of sacrifice has been unevenly distributed among the people. The $2\frac{1}{2}$ lakhs of combatants have been drawn almost exclusively, and 60,000 non-combatants mainly, from the rural agricultural classes. The urban population of the Province which forms one-tenth of its whole population has not borne a share proportionate to its obligations and even the attempt to recruit from its classes a battalion 1,000 strong for purely local service in the Indian Defence Force failed, only 150 fit men in all being enrolled.

As regards the organisation of resources, the Province subscribed nearly six crores (£ 4 millions) to the first and over $3\frac{3}{4}$ crores (£$2\frac{1}{2}$ millions) to the main section of the Second Indian War Loan—totals exceeded only by the wealthy presidencies of Bengal and Bombay.

It is not yet known what the provincial contribution to the Post Office Section of the Second War Loan amounted to.

The success attained was due largely to the effective system of propa-

ganda devised by the Provincial War Loan Committee and carried through by District Officials and Committees. Apart from the supply of animals and materials for the auxiliary services of the Army, the Province also contributed liberally to the various War and Relief Funds, the amount raised on the 12th December 1917 for "Our Day" alone having reached about 17 lakhs (£113,000).

On the 27th November 1918 Victory Celebrations were held at Lahore to commemorate the triumph of the Allied Forces. The Lieutenant-Governor, accompanied by the Army Commander of the Northern Command, the General Officer Commanding the 16th (Indian) Division, the heads of all the civil departments and the local leaders of the various communities passed in State Procession (on elephants) through the city to the Minto Park, where vast crowds were assembled. His Honour read out the Gracious Message of His Majesty the King-Emperor to the Viceroy, Princes and Peoples of India to the audience, and drew attention to the great and worthy part which the Province had played in the world war, which had now resulted in a crowning triumph due, under Providence, to the inspiration of a just cause, the united efforts and sacrifices of the King-Emperor's subject of all races and classes and above all to the heroism and endurance of the Army.

Throughout the celebrations, the military element was kept prominent.

The further depletion of the cadres of various departments in order to meet the military demand for officers intensified the strain on the administration, but fortunately there was no recrudescence of internal political trouble. A diminished stream of emigrants returning from America and the Far East reached the Province; but thanks to the arrangements for the surveillance and control of suspicious or dangerous characters, no trouble was experienced in dealing with these men. Indeed, it was found possible to relax restrictions placed on numbers who had learned their lesson and 73 men who had been interned in jail under the Ingress into India Ordinance were released, while 637 more were freed from minor restrictions. The number left in jail at the close of the year was 29 only of the more desperate and stubborn seditionaries, while about 710 others are prohibited under the Ingress Ordinance and the Defence of India Act from leaving the villages in which they reside.

During the remaining nine months of the calendar year 1918, it was found possible to show further clemency, and on the 31st December there were only 16 internees and about 600 under minor restrictions.

Supplementary note for incorporation at the end of the paragraph on "Condition of the People."

Since the close of the period referred to in the above remarks, in regard to which annual reports are available, the Province in addition to a failure of the 1918 monsoon, which caused extensive failure of the autumn crop and severe scarcity of fodder, has suffered from a terrible visitation of virulent influenza.

Outbreaks of influenza occurred throughout the Punjab in August; but the nature of the disease was so mild and apparently trivial, with no increase of mortality, that it attracted little or no attention among either the medical profession or the laity. Those attacked recovered rapidly without complications or sequelæ. It was, no doubt, introduced by immigrants, both civil and military, from Bombay and Karachi, and subsided by the end of the month. A second wave of the epidemic appeared first in the South-Western Districts of the Province in the first half of September, Multan and Dera Ghazi Khan reporting localised outbreaks of severe type with a high mortality. By the first week in October the epidemic was general throughout the Province; and reached its maximum intensity in the fourth week, the peak of the epidemic being in most places about the 28th October, from which date it began to decline with almost dramatic rapidity. By the 10th November in nearly every district fresh cases ceased to occur, but an aftermath in the form of mortality among old cases continued until the end of November, when the disease was finally extinct. The Kangra District offers a notable exception to

the general course of the epidemic in that in certain areas the intensity appears to have been delayed. For instance, the dispensary at Banjar showed the greatest number of admissions on the 7th December : and reports from Kulu mention that the maximum intensity was delayed until the 14th November. In most places the virulence rapidly declined during the first week in December. By the 25th of the month the disease had disappeared from the greater part of the valley, while by the end of November it had ceased in the tahsils of Nurpur and Palampur. Dharamsala was not free until the 1st January 1919, and the disease lingered later in Kulu.

The incidence of the disease would, however, appear to have been less in some localities off the line of Railway, and in villages off the beaten track ; and in urban compared with rural areas due, it may be assumed, in the former case to lack of facilities for communication with the outside world, and in the latter to the better sanitary conditions existing in towns where the general population is better clothed, fed and housed than in villages.

No grade of society proved immune to the disease which observed neither racial nor sex distinction. Europeans and Indians, Muhammadans and Hindus, were attacked alike. Naturally, compared with the well-to-do, the poor suffered more intensely, and among them the case mortality was higher, due to their less favourable environments and to the fact that they were less well nourished, clothed and tended to. For the same reasons case mortality was greater in rural areas than in towns. The age incidence shows that mortality was greatest among persons between 20 and 40 and that women suffered more than men. The latter fact may be accounted for by the indoor existence spent by most women in India.

It is estimated that the epidemic caused over 800,000 deaths in the months of October and November.

PUNJAB ADMINISTRATION REPORT, 1917-18.

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NOTE.—The General Summary is limited to between 20 and 30 pages and the Departmental Chapters to 150 pages.

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PART I.

GENERAL SUMMARY.

(The " year " throughout this report is not invariably the financial year ending 31st March 1918. At the heading of each chapter, with the exception of chapter I, a reference is given to the departmental reports which contain details of the subject dealt with. The " year " of the present report is for each such subject the year mentioned in the title of the departmental report so referred to. In general it may be said that the " year " in chapters I, IV, V, VII, VIII and IX means the financial year ending 31st March 1918, in chapter II it is the revenue year ending 30th September 1917, and in chapters III and VI it is the calendar year ending 31st December 1917.

The Administration Report for 1911-12 was a decennial report, and as such contained many sections of permanent interest to which reference may be necessary in order to understand the working of the Administration ; under the orders of the Government of India these sections are not repeated each year, but a reference is given to them in their place in the several chapters of part II of this report.

Except where otherwise stated, the Punjab in this report refers to the Punjab as at present constituted.)

Lieutenant-Governor :

SIR M. F. O'DWYER, G.C.I.E , K.C.S.I.

The War.

1. In a Province which has always been noted for its martial traditions the war naturally continued throughout the year to form the most serious pre-occupation of the administration. In July 1917, in response to the call for a more effective organization of the man-power and resources of India, a Provincial Recruiting Board was formed, consisting of a number of experienced Civil and Military officers and non-officials, all of whom had practical experience of the problems with which they were called upon to deal. The Lieutenant-Governor, who had been appointed a member of the Central Recruiting Board himself, assumed the presidentship of the Provincial Board which met regularly until the cessation of hostilities, and rendered the greatest assistance to Government in all matters connected with recruiting. A vigorous campaign was initiated in all districts with a view to attracting to the Army classes of military value, and a series of Recruiting Darbars was held by the Lieutenant-Governor at which the apathetic were aroused to their duty and the active were stimulated to further effort by

commendation and the judicious distribution of rewards in the form of land, khillats, titles and other distinctions. That the policy thus pursued has been amply justified by results may be gathered from the figures quoted by the Lieutenant-Governor in his speech to the Provincial Legislative Council in April 1918 when he recalled to the members the resolution which the Council had passed soon after the outbreak of war humbly assuring the King-Emperor of the determination of the people of the Province to serve His Majesty in every form in which their help might be required against the enemies of the Empire. Whereas during the first 2½ years of the war the Punjab furnished 124,000 men to the Indian Army, during the year 1917-18 it raised over 127,000 to fight the battles of the Empire. All the rest of India, including the Native States, with more than 12 times the Province's population, raised in the same period 137,000. In addition to these combatants, some 60,000 or 70,000 Panjabis were enlisted as non-combatants, followers, &c.

2. How well the soldiers of the Province have borne themselves in the field has been proved by the fact that they won up to April 1918 not less than 1,448 distinctions for gallantry in the field including 3 Victoria Crosses and 18 Military Crosses besides 126 Foreign Orders and Medals. In these honours the troops of the Ruling Princes and Chiefs of Patiala, Jind, Bahawalpur, Kapurthala, Faridkot, Maler Kotla and Chamba, who came forward with practical and generous offers, usually to double their existing contributions of fighting men, had their full share; and it was with peculiar pride and pleasure that the people of the Province learned of the selection of His Highness the Maharaja of Patiala to represent the Princes of India in the Imperial War Conference. The honour was welcomed as a just recognition of the part played by the premier Punjab State and the Punjab generally in the great conflict.

3. It cannot be disguised that the burden of sacrifice has been unevenly distributed among the people. The 2½ lakhs of combatants have been drawn almost exclusively, and the 60,000 non-combatants mainly, from the rural agricultural classes. The urban population of the Province which forms one-tenth of its whole population has not borne a share proportionate to its obligations, and even the attempt to recruit from its classes a battalion 1,000 strong for purely local service in the Indian Defence Force failed, only 150 fit men in all being enrolled.

4. As regards the organization of resources the Province subscribed nearly six crores (£ 4 millions) to the First Indian War Loan—a total exceeded only by the wealthy Presidencies of Bombay and Bengal. Apart from the supply of animals and materials for the auxiliary services of the Army, the Province also contributed liberally to the various War and Relief Funds, the amount raised on the 12th December 1917 for "Our Day" alone having reached about 17 lakhs (£ 113,000).

5. The further depletion of the cadres of various departments in order to meet the military demand for officers intensified the strain on the administration, but fortunately there was no recrudescence of internal political trouble. A diminished stream of emigrants returning from America and the Far East reached the Province; but, thanks

to the arrangements for the surveillance and control of suspicious or dangerous characters, no trouble was experienced in dealing with these men. Indeed, it was found possible to relax restrictions placed on numbers who had learned their lesson; and 73 men who had been interned in jail under the Ingress into India Ordinance were released, while 637 more were freed from minor restrictions. The number left in jail at the close of the year was 29 only of the more desperate and stubborn seditionaries, while about 710 others are prohibited under the Ingress Ordinance and the Defence of India Act from leaving the villages in which they reside.

Security.

6. The peace of the frontier in the Dera Ghazi Khan District was temporarily disturbed in the spring of 1918 by the insurrection of the Marris, a Baluch tribe in the Baluchistan Agency. The only incident in this outbreak which directly affected this Province was a raid made on the small hill station of Fort Munro and the adjoining police station of Khar by a force of Khetrans and Marris. The raid was repulsed and the military punitive expedition into the raiders' country promptly ended the trouble.

7. Internally, the Province has cause to congratulate itself on the continuance of the remarkable decline in crime to which attention was drawn last year. The total number of cases of all kinds reported shows a decrease of 28 per cent. as compared with the year 1912 when crime in the Province reached its high water-mark. The various causes, some temporary and others, it is hoped, permanent, which have contributed to this decrease, were discussed in last year's report, and need not be set out again in detail. It is, however, worthy of reiteration that the growing success of the Police in the struggle with crime and the criminal could never have been attained if the administration had not succeeded in enlisting the co-operation and active assistance of the public in the measures for their protection. One of the most effective forms of popular support has been the system of voluntary village patrols which has now been legalised so as to enable it to be enforced in case of need. Its statutory recognition will assist in maintaining the independence of village communities and at the same time furnish those responsible for internal security with a valuable weapon to be used when occasion requires. The hands of the administration have further been strengthened by the passing of the Habitual Offenders Act by which the movements of bad characters can be restricted.

8. Crime is also being attacked by means of the reformative treatment of the potential or actual criminal. A notable instance of this is the scheme for the registration, restriction and reclamation of the criminal tribes of the Province. Reference was made last year to the establishment of a central agency under a special officer of the rank of Deputy Commissioner for this purpose. The first annual report of the new department is an inspiring record of one of the most important experiments in social reform hitherto undertaken in the Punjab. Registration and classification of the adult males of such tribes have now been completed, the worst characters have been placed in or passed through a Reformatory Settlement at Amritsar, less unruly characters have been drafted with their families to industrial or agricultural settlements, and others, constituting the large majority, are merely kept

under certain restrictions within their own villages or police stations and subjected to supervision with a view to ensuring that they are kept out of mischief and have sufficient employment. The best men are exempted from all restrictions and their names struck off the register. At the end of 1917 there were 418 inmates in the reformatory, 1,223 in the agricultural and 2,840 in the industrial settlements.

9. One very encouraging feature of the work in these settlements is the response by philanthropic societies and business firms to the desire of Government to secure the co-operation of the people in the work of reformation. Organisations representing all the four great religions of the Province—Muhammadan, Christian, Sikh and Hindu—have come forward to undertake the management of one or more settlements.

10. The organised effort to bring these outcasts from society, whose members—men, women and children—are estimated at from 125,000 to 150,000 souls, within the pale of civilisation has commenced under favourable auspices, and its results are already traceable in diminished returns of crime.

11. Another interesting experiment in reformation which continues to make good progress is the treatment of adolescent criminals by "Borstal" methods, *i.e.*, by training and discipline in confinement followed by conditional release before the completion of their term of sentence of selected prisoners to approved individuals or societies. A Bill is under consideration to permit of the scope of this scheme being greatly extended.

Condition of the People.

12. The health of the year was influenced adversely by the exceptional meteorological conditions. An active and early monsoon, which set in at the beginning of June, continued till late in October. As a result of this, a severe epidemic of malarial fever spread over the Province from September 1917 onwards, causing a heavy death rate. The general birth rate—43·3 *per mille*—though slightly less than that of the preceding year, exceeded the average of the previous five years by 1 *per mille*. The death rate—37·9 *per mille*—exceeded that of the preceding year by 7·2 *per mille* and the average of the previous quinquennium by 6·7. The malarial epidemic contributed mainly to this unsatisfactory result.

13. The material prosperity of the agricultural population maintained its former level. The spring harvest of 1918 was excellent, the prices of agricultural produce were high and the continuous recruitment for the army provided a wide field of employment and an expanding source of income. Trading and commercial classes generally benefited from high prices while those with fixed incomes suffered correspondingly. Wage-earners were more than compensated for high prices by high wages, the demand for labour of all kinds having been unusually keen.

14. The Province being essentially agricultural, the condition of the agricultural population is the best index of general prosperity, and it is therefore satisfactory to record that the collections of land revenue practically equalled the demand, while the number of coercive processes issued was 25 per cent. less than in the previous year. The value of agricultural land also continues to appreciate and now averages Rs. 227 per acre, which represents 157 years' purchase of the land revenue assessment of the land sold. Last year the price represented 151 times

the land revenue as compared with 66 times 20 years ago. No better proof could be afforded of the leniency of the land revenue demand and of the remarkable increase of general prosperity within the last generation.

15. An indication of increased prosperity among other classes is furnished by the income-tax collections which amounted to 34 per cent. more than in the previous year, though this result is to some extent due to improved methods of assessment consequent on the employment of a special assessing staff.

Finance.

16. The conditions outlined above more than justified the favourable financial estimate of the year which had been framed. The opening balance was 59 lakhs greater than in 1916-17, the revenue exceeded the revenue of that year by 32 lakhs and expenditure declined by nearly 20 lakhs. The year closed with a balance of 194 lakhs. The causes of the decrease in expenditure were the necessity for rigid economy, the saving under salaries owing to the employment of so many officers in the army, the difficulty of obtaining materials and the consequent compulsory postponement of schemes, and the absence of any substantial expenditure under the famine relief head. Nearly all the main heads of revenue show an improvement, the only decrease being under "Irrigation," as the heavy monsoon of 1917 rendered the spring harvest of 1918 to some extent independent of canal irrigation.

Agriculture and Rural Economics.

17. The monsoon of 1917 was a very heavy one, and caused some damage to autumn crops, the outturn of which except cane and rice was poor, but left the land moist for the sowing of the spring crop. The spring harvest was a good one and the estimated outturns of the principal crops largely exceeded the normal.

18. The high prices obtained for agricultural produce and the generally prosperous condition of the agriculturist have already been referred to. A larger prosperity, however, awaits him when he can be persuaded to adopt more scientific methods and, during the year, the Agricultural Department has continued its efforts in this direction both by experiment, demonstration and propaganda. A useful advance is the provision of small demonstration plots which are being started in Gurdaspur and Montgomery to be worked through co-operative credit societies by the zamindars themselves under the guidance of the agricultural assistant of the district. The interest taken by district boards in agriculture is increasing year by year and many agricultural associations have been formed and demonstration farms started.

19. Progress in the sale of improved implements and in well-boring has been hampered by the restrictions caused by the war, but the success of the department in leading the zamindars to use better seed is well illustrated by the facts that the area under 4.-F. American cotton has risen from 215,000 to 390,000 acres, and that under pure "Punjab-11" wheat has more than doubled.

20. In connection with the maintenance and improvement of live-stock it is gratifying to note that there are now over a thousand stud bulls at work in the Province. The number of animals treated at veterinary hospitals was more than double the average of ten years ago, the increase being evidence of the growing popularity of the Veterinary Department.

Co-operative Credit.

21. Though the Co-operative Credit movement is discussed separately, as the activities of the Department extend also to the formation of industrial and urban societies, yet it is essentially a part of rural economics. Primarily, the Department aims at the removal of the burden of debt from the shoulders of the zamindar, and, secondly, it works in concert with the Agricultural Department for the improvement of agriculture. Great progress has been made in this respect during the year ; ten of the staff underwent a six months' training in practical agriculture at the Lyallpur College and numerous visits were paid by members of the staff to the farms at Lyallpur and Gurdaspur, each visitor receiving a week's training. The societies have also sold large numbers of improved agricultural implements and large quantities of first class seed obtained from the Agricultural Department. A number of cotton-sale societies have also been formed for the growth of pure American cotton, and for its sale by co-operative agency.

22. The year has been generally one of expansion and experiment. A new Central Bank has been formed, agricultural societies have increased by over five hundred, industrial societies, though hampered by war conditions, have made steady progress, and eight agricultural supply societies have been started. The ordinary credit societies have also begun to supply members with seed, salt, oil, etc.

23. What may prove to be a landmark in the development of the movement is the foundation of the Punjab Co-operative Union, Limited, a combination of all the Central Banks and Banking Unions which elect representatives in proportion to the number of primary Societies affiliated to them.

Trade and Industry.

24. There are only 191 factories in the province. The total number of operatives employed is approximately 32,000. The most common types of factories are naturally those connected with agriculture, such as cotton-ginning, oil-pressing and wheat-grinding. The internal trade returns for the year (*i.e.*, the returns mainly relating to exports to and imports from other parts of India) show a decrease in the volume of imports but an increase in their value. This is due to war conditions and has been apparent ever since the war commenced. Exports, on the other hand, have not been adversely affected by the war, and both as regards volume and value the year under report compares favourably with the pre-war period. The increased export of grains, particularly of wheat, as compared with the previous year, was especially notable.

25. The external trade returns (*i.e.*, those relating to trans-frontier trade with Afghanistan, Central Asia and Tibet) show a general increase of trade except in that with Tibet which has slightly decreased in value. The increase in the export trade to Afghanistan and Central Asia is notable, and in the latter case at all events is in part due to the dislocation of Russian trade.

Local Self-Government.

26. Local self-government on western lines is a plant of slow growth in the Punjab and the indifference and ignorance of the electors and the frequent absence of a true civic spirit in the elected constitute the most serious obstacles to its progress and also to the wider constitutional changes which are now in contemplation. In municipal administration new rules have been passed during the year which provide among other matters for

simultaneous elections, and it is hoped that these may help to effect some cure for the present apathy by presenting voters through the medium of a general election with an opportunity for a comprehensive review of important questions of municipal administration and teaching them to test the merits of candidates by their attitude towards such questions. Out of the 100 municipalities of the Province, 14 have non-official chairmen, and the work done by these gentlemen and by others as Vice-Presidents and Honorary Secretaries is such as to justify hopes of the early expansion of this important development of local self-government which the Local Government is most anxious to encourage. With a view to the introduction of similar developments in district boards, the opinion of non-official members of these boards was tested, but was found to be almost unanimous in desiring the continuation of the present system of official chairmen.

27. During the year an Act (IV of 1918) was passed providing facilities for the imposition of a terminal tax in municipalities in the Punjab, the intention being that this form of taxation should gradually replace the cumbersome octroi system.

28. In district board finance, only five districts now remain in which the maximum local rate is not imposed, and with expanding needs, many of the boards are faced with the alternatives of new forms of taxation or the more systematic exploitation of existing resources. Increased attention is being paid to education, medical relief, arboriculture and to agricultural farms.

29. On the whole there has been progress in local self-government.

Education.

30. The keynote of the remarks made last year on education was the expansion of the department during the previous quinquennium. Progress has again to be recorded except in the number of pupils attending primary schools which shows a slight and temporary decrease due to special causes. The present year has been remarkable rather for the wide survey made of educational methods and for the plans made and decisions formed for co-ordinating and directing the course of efforts for future expansion.

31. The most notable event was the introduction of a Compulsory Education Bill. It is premature to make any pronouncement on this Bill which is still before the Legislative Council, but the proposal paved the way for the appointment of a committee on District Board educational finance which met in October 1917; the orders passed as a result of its recommendations mark a great step forward in the improvement of rural education and for the creation by local bodies with substantial Government aid of the conditions which are essential before the principle of compulsion can be accepted. The scheme for the expansion and improvement of vernacular education has now taken shape and the aims of Government are declared to be the establishment of District Board schools at every centre where an average attendance of not less than 50 children may be expected, while a provisional two-mile limit between schools is intended to avoid overlapping. It has also been decided to have a five-year programme of expansion prepared on the basis of the financial capacity of each District Board. The ultimate recurring cost of the five-year programme when carried out will be about 12 lakhs of rupees, out of which Government will provide about two-thirds as well as large sums on non-recurring expenditure.

32. Another important decision arrived at by a conference held in April was that the vernacular medium should be adopted for instruction in the middle departments of Anglo-Vernacular schools for all subjects, except English. The results of this change, which marks a definite break with the past, will need to be carefully watched, especially in view of the fact that in a recent report of the Egyptian department of education a deterioration in the knowledge of English has been ascribed to the substitution of Arabic for English as the medium of instruction in secondary schools in that country.

33. To provide trained teachers and to attract men of suitable standing to the teaching profession is one of the problems of education in India, for the demand constantly tends to outstrip the supply. It is satisfactory to note that as a result of measures (such as the making of grants dependent on the provision of a satisfactory scale of salaries for teachers) which have steadily been pursued for improving pay and prospects, the quality of the candidates is steadily improving. The proportion of trained teachers in both secondary and primary schools is also increasing, though it is still only 53 per cent.

34. No new normal school for men was opened during the year, but sanction has been accorded to the opening of an additional normal school at Lahore and also of four normal schools for women at centres outside the capital, so as to provide one for each division of the Province. A proposal for a large increase in the staff of the Central Training College at Lahore is under consideration. The popular tendency to regard mere literacy as the end and object of education is gradually being eradicated, and there is a growing and healthy demand for scientific, industrial, commercial and agricultural training. The Agricultural College at Lyallpur, the School of Engineering at Rasul, the Veterinary and Medical Colleges and Mayo School of Arts at Lahore and the Clerical and Commercial Classes at Amritsar have all made solid progress, and a proposal for the institution of a Diploma for Commerce is under consideration. In fact, the professional and technical institutions generally cannot keep pace with the demand for qualified graduates. One new Arts College—the Guru Nanak Khalsa College at Gujranwala—was opened. How far the Punjab will ever develop industrially is for the future to decide, but, with the increasing interest shown in scientific agriculture and in the transport and marketing of produce, there is an undoubted opening for industries, such as sugar refining and cloth manufacture, which are connected with agriculture. A healthy sign of the times in this connection is the increased stress which is being laid on the provision of some agricultural training in schools and arrangements have now been introduced for putting teachers through a practical course of agriculture at the Lyallpur College which should pave the way for making the teaching of agriculture in secondary schools more thorough.

35. In female education little progress has to be recorded, the number of pupils showing but a small net increase. This is probably due to a great extent to the lack of trained teachers which will, it is hoped, soon be remedied by the provision of the normal schools referred to above. The increased interest of women in medical work is indicated by a satisfactory rise in the number of pupils at the Ludhiana Medical School for Women.

PART II.

DEPARTMENTAL CHAPTERS.

CHAPTER I.

PHYSICAL AND POLITICAL GEOGRAPHY.

1.—Physical Features of the Country, Area, Climate and Chief Staples.

(See pages 1—16 of the report for the year 1911-12.)

2.—Historical Summary.

(See pages 16—30 of the report for the year 1911-12.)

3.—Form of Administration.

(See pages 30—48 of the report for the year 1911-12.)

4.—Character of Land Tenures and System of Surveys and Settlements.

(See pages 48—58 of the report for the year 1911-12 and the Punjab Settlement Manual.)

5.—Civil Divisions of British Territory.

(See pages 59—62 of the report for the year 1911-12.)

6.—Details of the last Census—Tribes and Language.

(See pages 62—71 of the report for the year 1911-12.)

7.—Changes in the Administration.

1. There was no change in the office of Lieutenant-Governor, Sir Michael O'Dwyer, G.C.I.E., K.C.S.I., remaining the head of the Province throughout the year under report.

2. The success of the arrangements made in previous years for the systematic inspection of Judicial Courts justified the re-appointment of a 3rd temporary Additional Judge in the Chief Court for 6 months in the cold weather of 1917-18.

8.—Relations with Tributary States and Frontier Affairs.

I.—PHULKIAN STATES.

3. Mr. L. M. Crump, I.C.S., held charge of the Agency throughout the year. The Post of Personal Assistant remained vacant.

PATIALA.

Area, 5,412 square miles; population, 1,407,659; approximate revenue, Rs. 110 lakhs; army and police, 5,557; Major-General Maharaja Sir Bhupendra Singh, G.C.I.E., G.B.E., Sidhu Jat; aged 27; has a male heir; salute, 19 guns (including 2 personal).

4. His Highness the Maharaja enjoyed good health throughout the year under report except for two attacks of influenza. He attended the Lahore Darbar in April, the Chiefs' Conference at Delhi in November as well as the Select Committee which met at Bikaner and Alwar, and finally at Patiala in January 1918. His Highness was appointed a Member of the Central Recruiting Board and attended several of the meetings at Simla and Delhi. He was one of the Ruling Princes and Chiefs invited to Delhi to meet His Excellency the Viceroy and the Right Hon'ble the Secretary of State for India in February 1918. During the year, His Highness and his successors were exempted from presenting *nazars* in Viceregal Darbars. For services in connection with **Personal.**

PHYSICAL AND POLITICAL GEOGRAPHY.

the war the Maharaja's salute was raised by the addition of two guns (personal) on the 1st January 1918, and he was also appointed a G.B.E.

The War.

5. The State continued to contribute generously in men and money, etc., and the total amount of aid in money from the commencement of the war up to the end of the year was reported by the Darbar to be Rs. 25,39,000. The total number of recruits supplied direct by the Patiala State to the Indian Army and enlisted at the Divisional Recruiting centre from the commencement of the war up to the end of April 1918 is 12,531 or 1·58 per cent. of the total male population. Besides this the casualties occurring in the State Forces or Corps in the field or in India have all along been supplied by reinforcements from the State Depôt, and recruiting for the Imperial Service Troops on active service has been constantly in progress; and the grand total of recruits is 19,183, or 2·42 per cent. of the total male population. In response to the Premier's message to India His Highness the Maharaja offered to raise three new battalions for the Indian Army. The pay of the men and officers in the State Army has been raised to stimulate recruiting and also to encourage the rank and file already in service.

Crops and Irrigation.

6. The autumn harvest of 1917 was seriously damaged by excessive rainfall but the succeeding spring harvest was good. No new irrigation projects were begun or under construction. The irrigation system is now fully developed and there are no openings for future expansion except in the way of small improvements and re-adjustments.

Public Health

7. The birth rate for the year (36·2 *per mille*) was less than that of the previous year and the death rate (30·39 *per mille*) showed an increase, this being due to epidemics of fever and plague.

JIND.

Area, 1,259 square miles; population, 271,728; approximate revenue, Rs. 24 lakhs; army and police, 1,815; Lieutenant-Colonel Maharaja Sir Ranbir Singh, G.C.I.E., K.C.S.I., Sidhu Jat; aged 39; has no male heir; salute 15 guns (including 2 personal).

Personal.

8. His Highness enjoyed excellent health. He lived almost the whole year in the State except for a short visit to Lahore in April 1917 on the occasion of the Viceregal Darbar and for a shooting excursion to the Central Provinces. No important change took place in the administration of the State. In recognition of his eminent services during the war an increase of two guns (permanent) and two (personal) has been made in His Highness' salute and he has also been granted the Honorary rank of Lieutenant-Colonel and the hereditary title of Rajendra Bahadur.

The War.

9. The war expenses of the State during the year amounted to more than 8 lakhs (including 3½ lakhs invested in the Indian War Loan), making a total war expenditure since the commencement of the war of over 26 lakhs. The Maharaja offered all the camels in Charkhi Dadri District free of charge to Government and 140 were selected.

10. The number of recruits directly supplied to the Indian Army by the Jind Darbar or enlisted by recruiting parties in the State territory from 1st June 1917 to 31st March 1918 was 2,234, which, added to the previous aggregate, gives a total of 6,144, or 4·09 per cent. of the total male population. If 1,137 men enlisted in the Jind Imperial Service Regiment be taken into account the grand total comes to 7,281, or 4·85 per cent. of the total male population. The figures are remarkable and the Darbar may well be proud of them. During the year under report a double company was added to the strength of the Jind Imperial Service Regiment for the duration of the war. The regiment returned to Sangrur after 3¼ years' active and arduous service in East Africa where their work earned the high commendation of the General Officer Commanding, and the Darbar received congratulatory messages from His Excellency the Viceroy and the Lieutenant-Governor. The regiment has earned in all 38 distinctions in the field including one C.I.E. and a Military Cross. The Chief Minister of the State, Sardar Bahadur Sardar Shamsher Singh, was honoured with a K.C.I.E. in recognition of his war services.

11. Exceptionally heavy rains seriously damaged the autumn crops, but the spring crop was on the whole normal. Of the total land revenue demand for the year all but a small amount was collected. Crops.

12. Although malaria assumed an epidemic form there were 12,405 births as compared with 6,639 deaths in the State during the year. Public Health.

NABHA.

Area, 928 square miles; population, 248,887; approximate revenue, Rs. 19½ lakhs; army and police, 1,532; Maharaja Ripudaman Singh, Sidhu Jat; aged 35; has no male heir; salute 11 guns.

13. His Highness the Maharaja enjoyed good health during the year. He visited Simla in the summer and attended the Chiefs' Conference held at Delhi in the autumn of 1917. Personal.

14. The strength of the Imperial Service Troops is about 600. At the close of the year arrangements were being made for the employment of this force in the field. Other war offers made by the Maharaja were accepted The War.

15. The outturn of crops was fair and few suspensions of land revenue had to be granted. Crops.

16. The State enjoyed immunity from plague and cholera and the numbers of births and deaths were 4,454 and 2,406, respectively. Public Health.

II.—STATES OF THE BAHAWALPUR AGENCY.

17. Mr. W. C. Renouf, I.C.S., held charge of the Agency during the year.

BAHAWALPUR.

Area, 15,000 square miles; population, 780,641; approximate revenue, Rs. 41 lakhs; army and police, 2,068; Nawab Sadiq Muhammad Khan, Abbasi, V, Daudputra; aged 13; salute 17 guns.

18. His Highness the Nawab has enjoyed generally good health throughout the year, and his progress at the Aitchison College continues to be satisfactory. The State is successfully administered by the Council of Regency and received a visit from the Lieutenant-Governor in February 1918. Personal

19. The Imperial Service Camel Corps has rendered valuable war service. Over 800 Imperial service camels together with officers and men were employed in two frontier operations and on both occasions the State troops received high praise for their work. The Camel Escort, which has been employed in Egypt with the Alwar Infantry, was mentioned for good work at the battle of Gaza. Despite the absence of all tradition of Military service the Darbar has endeavoured to co-operate in recruiting measures and over 1,000 recruits had been supplied by 31st March 1918. Rupees 40 and 11 lakhs were invested by the Darbar and the people of the State respectively in the first War Loan and war contributions to various funds amounted to Rs. 40,000, apart from Rs. 69,400 subscribed by the State and the people towards "Our Day." The War.

MALER KOTLA.

Area, 167 square miles; population, 71,144; approximate revenue, Rs. 14 lakhs; army and police, 1,026; Major Nawab Sir Muhammad Ahmad Ali, Khan Bahadur, K.C.S.I., Pathan; aged 37; has a male heir; salute 11 guns.

20. The health of His Highness the Nawab remained good throughout the year. During the summer he visited Mashobra and Simla. His Highness' third son died in May 1917 of enteric fever. Personal.

21. The 1st Company of the State Sappers continues to do excellent work in Mesopotamia and is, like the 2nd Company at head-quarters, over strength. Several honours have been earned by officers and men at the front, and His Highness continues to evince a keen interest in his troops. Every assistance is rendered to the Government recruiting The War.

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officers. Donations to various war funds amounted to Rs. 13,410, and Rs. 10,750 were subscribed by State subjects towards Post Office Cash Certificates.

Public Health.

22. The numbers of births and deaths registered during the year were 852 and 466, respectively, as compared with 893 and 347 in the previous year. The increase in the number of deaths is chiefly due to malarial fever and small-pox.

FARIDKOT.

Area, 642 square miles; population, 130,294; approximate revenue, Rs. 13½ lakhs; army and police, 371; Major Maharaja Brij Indar Singh, Barar Bans, Jat; aged 21; has a male heir; salute, 11 guns.

Personal.

23. In recognition of his eminent war services His Highness was granted the personal title of Maharaja and was made an Honorary Major in the British Army. It has, however, to be recorded with profound regret that this very promising young Chief died after the close of the year under report in December 1918.

The War.

24. The Imperial Service Troops continued to render valuable services in East Africa up to February 1918, when they returned to the State after an absence of three years. The General Officer Commanding, East Africa, sent an appreciative message in regard to their work which was duly communicated to the Darbar together with the congratulations of Their Excellencies the Viceroy and Commander-in-Chief and His Honour the Lieutenant-Governor.

25. Recruitment is progressing fairly well in the State both for the Imperial Service Troops and for the Indian Army.

26. A sum of 6¼ lakhs was subscribed by the State and one of 5¼ lakhs by the people to the War Loan and the State has also contributed over one lakh to various war funds.

Public Health.

27. There were 4,205 births and 2,600 deaths registered as compared with 4,712 births and 2,636 deaths in the preceding year. The health of the people was generally good.

III.—STATES OF THE JULLUNDUR DIVISION.

KAPURTHALA.

Area, 630 square miles; population, 268,133; approximate revenue, Rs. 31 lakhs (inclusive of about Rs. 16 lakhs income from Oudh States); army and police, 2,416; Lieutenant-Colonel Maharaja Sir Jagatjit Singh, Bahadur, G.C.S.I., Ahluwalia Sikh; aged 45; has a male heir; salute, 15 guns (including 2 personal); tribute, Rs. 1,31,000.

Personal.

28. His Highness the Maharaja spent the year in the State except for a visit to Kashmir for the hot weather. The State was efficiently administered under his personal supervision. For services in connection with the war the Maharaja's permanent salute was raised on 1st January 1918 to 13 guns, and his personal salute to 15 guns. He was also granted the rank of Honorary Lieutenant-Colonel in His Majesty's Army.

The War.

29. During the year the strength of the Depôt of the Imperial Service Regiment was nearly doubled, an auxiliary force of 200 men was raised and over 2,000 recruits were furnished for the Indian Army, and a sum of Rs. 2,50,000 was invested in the Indian War Loan. Rs. 13,773 (including the subscriptions of State officials and subjects) was contributed to "Our Day" Fund.

Public Health.

30. The State after being nearly free from plague in 1916-17 suffered a fresh visitation causing 1,093 cases and 677 deaths. There were also 9 cases and 5 deaths from cholera in the year.

MANDI.

Area, 1,200 square miles; population, 181,110; approximate revenue, Rs. 7 lakhs; army and police 360; Raja Jogendra Sen, Rajput Mandal; minor; salute, 11 guns; tribute, Rs. 1 lakh.

Personal.

31. His Highness the Raja is reported to have made good progress at the Aitchison College.

32. The number of recruits furnished by the State to the Indian Army was 373 as compared with 111 in the previous year.

33. The Darbar invested Rs. 1½ lakhs in the War Loan and also converted nearly Rs. 2 lakhs of Government securities. In addition over Rs. 63,000 worth of Post Office Cash Certificates were purchased in the State. The War.

34. A comprehensive report received from the Superintendent on the year's administration discloses a record of steady progress. Tahsil buildings are being constructed at the head-quarters of the outlying tahsils and the revenue and police establishments have been re-organized. The result of the land revenue settlement completed at a cost of Rs. 2,35,000 has been to enhance the revenues of the State by Rs. 81,000, after making full allowance for the cost of the abolition of various imposts, a substantial rise in the pay of a number of State servants and the establishment of a proper system of village officers. The reforms introduced should confer great advantages both on the State and on the people in this hitherto backward hill tract. The re-organized forest administration was very successful, showing a profit of nearly Rs. 40,000 on the year's working. The State contributed Rs. 30,000 towards the construction of the new Larji-Mandi Road. Administration.

SUKET.

Area, 420 square miles; population, 54,928; approximate revenue, Rs. 2½ lakhs; army and police, 78; Raja Sir Bhim Sen, K.C.I.E., Rajput; aged 33; has no male heir; salute, 11 guns; tribute, Rs. 11,000.

35. The title of K.C.I.E. was conferred on His Highness the Raja on 1st January 1918. Personal.

36. Government accepted His Highness' offer of a contingent of 50 men under his uncle, Mian Ganga Singh, for service and also contributions of Rs. 24,000 and Rs. 7,000 towards the expenses of the war. The War.

IV.—LAHORE DIVISION.

CHAMBA.

Area, 3,216 square miles; population, 135,873; approximate revenue, Rs. 3,89,000; army and police, 419; Raja Sir Bhure Singh, K.C.S.I., K.C.I.E., Hindu Rajput; has a male heir; aged 48; salute, 11 guns; tribute, Rs. 2,225.

37. His Highness did not enjoy very good health during the year but is reported to be better now. He attended the Viceregal Darbar at Lahore in April 1917 and the Delhi Conference in the autumn, and maintained the high standard of administration of previous years. Personal.

38. The Raja is making personal efforts to stimulate recruiting in his State and to raise a Chamba Company for a Dogra Regiment. The State High School has now been included in the list of secondary schools recognised by the Punjab Education Department. Miscellaneous.

V.—STATES OF THE AMBALA DIVISION.

SIRMUR (NAHAN).

Area, 1,108 square miles; population, 138,520; approximate revenue, Rs. 6 lakhs; army and police, 633; Lieutenant-Colonel Maharaja Sir Amar Prakash, K.C.S.I., Rajput; aged 29; has a male heir; salute, 11 guns.

39. His Highness the Maharaja has administered his State efficiently in spite of ill-health, which compelled him to visit Dehra Dun for a part of the year and also prevented him from attending the Lahore Darbar in April and the Delhi Conference in November. He received the title of Maharaja as an hereditary distinction and the rank of Honorary Lieutenant-Colonel on 1st January 1918 in recognition of war services. Personal.

40. The Double Company of Imperial Sappers and Miners has been re-constituted and at the close of the year under report was serving in Mesopotamia. The Darbar contributed Rs. 8,500 to different war funds during the year and Rs. 5,000 to the "Our Day" Fund. The War.

PHYSICAL AND POLITICAL GEOGRAPHY.

KALSIA.

Area, 168 square miles ; population, 55,909 ; approximate revenue, Rs. 2,74,000 ; army and police, 164 ; Raja Ravi Sher Singh, Jat, Sandhu Sikh ; aged 15 ; has no male heir.

Personal.

41. The Raja continues to do well at the Aitchison College and has enjoyed good health. He attended the Viceregal Darbar at Lahore in April 1917 and spent the summer vacation at Mussoorie. On 13th February 1917 he was betrothed to the daughter of His Highness the Maharaja of Patiala. The Raja's step-sister was betrothed on 15th February 1918 to Kanwar Nau Nihal Singh, son of Kanwar Baldeo Singh, of Marsan, a Jagirdar in the United Provinces.

Administration.

42. The State was efficiently managed by the Council of Regency. A new Superintendent of Forests, who holds a diploma of the Lyallpur Agricultural College, has been appointed to manage the State forests, which are reported to be well worked according to the revised plan.

The War.

43. Recruiting has made successful progress. The State contributed Rs. 14,000 to the "Our Day" Fund.

PATAUDI.

Area, 53 square miles ; population, 19,543 ; approximate revenue, Rs. 1 lakh ; army and police, 77 ; Nawab Muhammad Iftikhar Ali Khan, Bahadur, Afghan ; aged 8 years ; has no male heir.

Personal.

44. Nawab Muhammad Ibrahim Ali Khan died at Delhi on 29th November 1917 and was succeeded by his eldest son, Nawab Muhammad Iftikhar Ali Khan, who was formally installed in February 1918. A Council is now managing the State under the supervision of the Commissioner.

The War.

45. The State has invested Rs. 63,000 in the War Loan and has subscribed towards the "Our Day" Fund and the War hospital at Ambala.

LOHARU.

Area, 224 square miles ; population, 18,597 ; approximate revenue, Rs. 1,00,684 ; army and police, 80 ; Nawab Sir Amir-ud-din Ahmad, Khan Bahadur, K.C.I.E., Mughal ; aged 58 ; has a male heir ; salute 9 guns.

Personal.

46. The Nawab is gradually associating his son and heir in the general management of the State. He visited Almora owing to the ill health of the Begum who has since died. In recognition of his war services the Nawab's personal salute of nine guns was made permanent on the 1st January 1918.

The War.

47. The State subscribed Rs. 1,000 to Lady O'Dwyer's Comfort Fund and the same amount to the "Our Day" Fund. The Nawab presented Rs. 2,250 towards the Punjab Aeroplane Fleet Fund in 1915-16, a contribution of which mention was omitted in last year's report. The State has also invested Rs. 10,000 in the War Loan

DUJANA.

Area, 100 square miles ; population, 25,485 ; approximate revenue, Rs. 77,170 ; army and police, 122 ; Nawab Muhammad Khurshaid Ali Khan, Bahadur, Pathan ; aged 34 ; has a male heir ; tribute 50 Cavalry on requirement.

Personal.

48. The Nawab's eldest son died in July 1917, and his second son, Iqtidar Ali Khan, is now the heir-apparent. On account of this bereavement and of the ill health of Iqtidar Ali Khan, the Nawab spent the greater part of the year outside his territory.

Miscellaneous.

49. The State contributed Rs. 1,600 to the "Our Day" Fund.

VI.—STATES UNDER THE POLITICAL CONTROL OF THE SUPERINTENDENT, HILL STATES, SIMLA.

50. The chief particulars of the Simla Hill States are given in the following table :—

No.	State.	Area in square miles including feudatories.	Population in 1911.	Approximate revenue.	Tribute.	Name of Chief.	Race.	Age.	Title.	Whether male heir or not.	Military forces and Police.	REMARKS.
				Rs.	Rs.							
1	Bilaspur ...	448	93 107	3,33,425	8,000	Bijai Chand, K.C.I.E., C.S.I.	Rajput ...	45	Raja ...	Yes	204	Permanent salute, 11 guns.
2	Bashahr ...	3,820	88,957	1,44,442	3,945	Padam Singh ...	Do. ...	44	Do. ...	Yes (adopted)	13	
3	Nalagarh ...	256	49,230	1,57,460	5,000	Jogindar Singh ..	Do. ...	48	Do. ...	No	48	
4	Keonthal ...	116	25,354	1,00 971	...	Hamendar Sen ...	Do. ...	13	Do. ...	No	36	
5	Baghal ..	124	26,008	68,976	3,600	Bikram Singh	Do. ...	25	Do. ...	Yes	25	
6	Bhagat	36	8,797	50,000	...	Durga Singh ...	Do. ...	17	Rana	No	43	
7	Jubbal ...	288	23,627	1,98,063	2,520	Bhagat Chand ...	Do. ...	29	Raja ...	Yes	19	
8	Kumharsain ...	90	12,219	30,000	2,000	Vidyadhar Singh ...	Do. ...	23	Rana ...	No	7	
9	Bhajji ...	96	14,972	33,504	1,440	Bir Pal ...	Do. ..	12	Do. ...	No	32	
10	Mailog ...	43	8,663	37,783	1,440	Durga Chand ..	Do. ...	20	Thakur	No	16	
11	Balsan ...	51	6,225	18,500	1,080	Bir Singh ...	Do. ...	54	Rana ...	Yes	...	
12	Dhami ...	26	4,484	30,000	720	Hira Singh, C.I.E. ...	Do.	41	Do. ...	Yes	25	
13	Kothar ...	20	4,016	17,000	1,000	Jagjit Chand ...	Do. ...	31	Do. ...	Yes	8	
14	Kunhiar ...	80	2,208	6,000	180	Hardeo Singh ...	Do. ..	20	Thakur ...	No	9	
15	Mangal ...	12	1,267	1,000	72	Tilok Singh ..	Do. ...	67	Rana ...	Yes	...	
16	Bija ...	4	1,064	5,000	124	Puran Chand ...	Do. ...	22	Thakur ..	Yes	8	
17	Darkoti ...	8	521	7,000	...	Ram Saran Singh ...	Do. ...	75	Rana ...	Yes	...	
18	Taroch ...	67	4,493	50,000	288	Surat Singh ...	Do. ...	31	Thakur	Yes	...	
19	Sangri ...	16	3,022	5,700		Hira Singh ...	Do. ...	61	Rai ...	Yes	...	Tributaries of Bashahr.
20	Kaneti ...	19	2,854	8,590	...	Amog Chand ...	Do. ...	27	Thakur ...	No	...	
21	Delath ...	42	1,392	2,743		Narindar Singh ...	Do. ...	68	Do. ...	Yes	...	
22	Koti ...	50	8,265	44,154	...	Raghbir Chand ...	Do. ..	58	Rana ...	Yes	56	Tributaries of Keonthal.
23	Theog ...	144	6,345	14,591	...	Padam Chand ...	Do. ...	32	Thakur ...	Yes	8	
24	Madhan	9	3,901	5,500	...	Randhir Chand ...	Do. ...	31	Do. ...	No	6	
25	Ghund ...	28	1,887	5,610	...	Ranjit Singh ...	Do. ...	35	Do. ...	Yes	...	
26	Ratesh ...	12	472	700	...	Hira Singh ...	Do. ...	50	Do. ...	Yes	...	
27	Rawin	7	749	4,591	...	Kidar Singh ...	Do. ...	41	Do. ...	Yes	...	Tributaries of Jubbal.
28	Dhadi ...	25	244	1,600	...	Dharm Singh ...	Do. ...	30	Do. ...	Yes	...	

51. His Highness the Raja was granted the title of K.C.I.E. on the 4th June 1917 in view of the continued good service of his State in supplying recruits to the Indian Army. **Bilaspur.**

52. With the approval of Government the post of Wazir was abolished and a Council established to carry on the administration. The Raja has shown great energy in enlisting no less than 697 recruits

during the year. The State invested Rs. 1 lakh and its subjects another Rs. 15,000 in the first War Loan. It is subscribing Rs. 2 lakhs to the new loan of 1918.

Bashahr.

53. The post of Manager, Bashahr State, was abolished on the 30th November 1917. Raja Padam Singh has been invested with full powers, subject to certain minor reservations, and has assumed control of the administration. The pseudo-Rana Bahadur Singh again appeared in the State towards the close of the year under report, but the Raja promptly arrested the impostor.

54. The Raja has shown great personal interest both in securing subscriptions from his subjects to the War Loan, in the shape of Post Office Cash Certificates, and in recruiting. He had invested Rs. 2 lakhs in Government loans in 1915 and 1916, so that the advent of the War Loan found him with no further surplus to invest. The inhabitants of the State, however, subscribed Rs. 47,806, almost entirely in the form of Post Office Cash Certificates.

55. Bashahr was the first of the States in the interior to supply recruits, who numbered 138.

Nalagarh.

56. Subscriptions to the War Loan during the year amounted to Rs. 1¼ lakhs from the Raja and 181 recruits were enlisted.

Keonthal.

57. The minor Chief is being educated at the Aitchison College and is making good progress. The administration of the State has proceeded satisfactorily during the year and the finances are being steadily re-established.

Baghal.

58. Rai Sahib Mian Durga Singh, Manager, was accorded the title of Rai Bahadur during the year and is doing well in Baghal.

59. The elder of the Raja's two sisters was married in February 1918 to the Rana of Kumharsain. The youngest Rani died in March.

60. Twenty-nine recruits have been supplied during the year and Rs. 20,000 were invested in the War Loan.

Baghat.

61. Rana Durga Singh was married to a sister of the Raja of Tehri-Garhwal in November 1917. The title of Rai Sahib has been conferred on Kanwar Amar Singh, uncle of the Chief and Manager of the State. The young Chief's education is now practically completed.

62. Rupees 25,000 was invested by the State in the War Loan and 52 recruits were furnished in 1917-18.

Jubbal.

63. The hereditary title of Raja has been conferred on the Chief, who is administering his State very efficiently. The Rani Sahiba died on 30th March 1918. The Raja made a further donation of Rs. 5,000 during the year to the St. John Ambulance Association, and presented a motor launch for use in Mesopotamia at a cost of Rs. 8,000. The total number of recruits enlisted during the year was 113. They include the brother of the Chief who now holds the rank of Jamadar in the 41st Dogras.

Kumharsain.

64. Rana Vidhyadhar Singh was invested with the powers of Manager of his State on the 23rd September 1917, the Government Manager being withdrawn. The Rana, whose first wife had died, was married on the 1st February 1918 to the elder sister of the Raja of Baghai. Rupees 20,000 were invested in the War Loan.

Bhajji.

65. Rana Bir Pal was installed on the 22nd February 1918. The administration of the Council is still on the whole satisfactory. Rupees 30,000 were invested in the War Loan.

Mailog.

66. The Thakur's course at the Aitchison College is now practically concluded.

67. Investment in the War Loan amounted to Rs. 30,000 from the State.

Balsan.

68. The Administration is proceeding smoothly. Rs. 20,000 were invested in the War Loan.

Dhami.

69. The Settlement Report referred to in last year's report was submitted to Government and the Chief was congratulated on his work.

Kunhiar.

70. Thakur Hardeo Singh continues to do well and was invested with full powers subject to certain minor restrictions.

Mangal.

71. At the request of Rana Tilok Singh, who is now 67 years of age, his son, the Tikka Sahib, has been permitted to act as regent of the State.

Bija.

72. Thakur Puran Chand was installed on the 23rd January 1918.

Taroch.

73. A long standing dispute between Taroch and Jubbal has been amicably settled by the two chiefs. The proposed investment of Rs. 50,000 in the War Loan was duly made.

Koti.

74. The Tikka of Koti was married in February 1918 to a daughter of the Thakur of Theog.

75. The State invested Rs. 10,000 in the War Loan. Its settlement concluded on the 31st March 1918.

FRONTIER AFFAIRS.

76. The peace of the frontier in the Dera Ghazi Khan District was temporarily disturbed in the spring of 1918 by the insurrection of the Marris, a Baluch tribe in the Baluchistan Agency. The only incident in this outbreak which directly affected this Province was a raid made on the small hill station of Fort Munro and the adjoining police station of Khar by a force of Khetrans and Marris. The raid was repulsed and the military punitive expedition into the raiders' country promptly ended the trouble. The conduct of the Dera Ghazi Khan Tumandars was exemplary. The Hon'ble Nawab Sir Bahram Khan, Mazari, stayed at Dera Ghazi Khan during the period of anxiety and by virtue of his great experience of the men and matters concerned was able to give valuable assistance and advice to the military and civil authorities. The other Tumandars remained in their tribal territory administering tribal matters and sending information to headquarters.

77. Particular credit is due to S. Hasan Khan, uncle of the Gurchani Chief, and S. Paind Khan, acting Bozdar Chief, who were able to keep their tribes from joining in the insurrection despite pressure put on them by the rebels.

78. Sardar Lashkar Khan, Tumandar of the Gurchani tribe, died on 28th May 1917, and was succeeded by his elder son Sardar Ghulam Haider Khan. The actual management of the tribe has been placed in the hands of S. Hasan Khan, brother of the late Tumandar, who has been given 1st class magisterial powers. The young chief is inexperienced and it is hoped that under the guidance of his uncle he will develop the strength and judgment essential for proper administration of this somewhat turbulent tribe.

79. S. Fazal Ali Khan, Tumandar of the Kasranis, died on the 27th July 1917, and was succeeded by his second son, Sardar Imam Bakhsh, who has been given 1st class magisterial powers.

80. Both the autumn and the spring sessions of the Chiefs' Jirga during the year under report were interfered with, the former by abnormal rains and the latter by the Marri rising. His Honour the Lieutenant-Governor held a Darbar at Dera Ghazi Khan on the 18th February 1918.

9.—Condition of the People.

81. The health of the year was influenced adversely by the exceptional meteorological conditions. An active and early monsoon, which set in at the beginning of June, continued till late in October. As a result of this, a severe epidemic of malarial fever spread over the Province from September 1917 onwards, causing a heavy death rate. The general birth rate—43·3 *per mille*—though slightly less than that of the preceding year, exceeded the average of the previous five years by 1 *per mille*. The death rate—37·9 *per mille*—exceeded that of the preceding year by 7·2 *per mille* and the average of the previous quinquennium by 6·7. The malarial epidemic contributed mainly to this unsatisfactory result.

82. The material prosperity of the agricultural population maintained its former level. The spring harvest of 1918 was excellent, the prices of agricultural produce were high and the continuous recruitment for the army provided a wide field of employment and an expanding source of income. Trading and commercial classes generally benefited from high prices while those with fixed incomes suffered correspondingly. Wage-earners were more than compensated for high prices by high wages, the demand for labour of all kinds having been unusually keen.

CHAPTER II.

ADMINISTRATION OF THE LAND.

Detailed information on the subjects dealt with in this Chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

Realization of the Revenue— Revenue Surveys and Settlements— Report on the Land Revenue Administration of the Punjab for the year ending 30th September 1917.

Professional Surveys.—General Report on the Operations of the Survey of India for the year ending 30th September 1917.

Waste Lands and Government Estates.
1. Annual Report on the Punjab Colonies for the year ending 30th September 1917.
2. Report on the Land Revenue Administration of the Punjab for the year ending 30th September 1917.

Wards' Estates.—Report on the Administration of Estates under the Court of Wards in the Punjab for the year ending 30th September 1917.

Revenue and rent-paying classes.—Report on the Land Revenue Administration of the Punjab for the year ending 30th September 1917.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Agricultural Statistics of India, Volume I.

Area Totals—Table 1 J.	Transfers of Land—Table 6 H.
Classification of Area—Table 2 I.	
Incidence of Land Revenue—Table 5 I.	Changes in Boundaries—Appendix B.

10.—Realization of the Revenue.

FIXED LAND REVENUE.

Demand and collection.

83. The fixed land revenue demand rose from Rs. 226·29 to 231·51 lakhs or a net increase of 5·22. The gross increase was 8·51 lakhs due mainly to increases on account of the introduction of revised assessments in nine districts, but against this must be set off a gross decrease of 3·28 lakhs due chiefly to reduction of assessments on account of wells falling out of use or alteration of assessments from fixed to fluctuating. Of the total demand, 230·50 lakhs or 99·6 per cent. was collected and, excluding small amounts placed under suspension and undetermined or irrecoverable balances, only Rs. 8,000 remained uncollected at the end of the year. Owing to favourable agricultural conditions there was little need of suspensions and remissions, and the total sum under suspension, including previous years, was reduced from 16·26 to 5·63 lakhs, only Rs. 18,000 of this reduction being due to remission of amounts formerly under suspension.

Riverain action.

84. As a result of alluvion and diluvion operations there was a net increase of Rs. 21,000 to the fixed land revenue roll as compared with Rs. 10,000 last year. The total assessable area of the province was increased through alluvion by 7,000 acres, while the revenue demand was enhanced on account of improvement by deposit of silt on 36,500 acres and reduced for deterioration on 15,000 acres.

FLUCTUATING LAND REVENUE.

Demand and collection.

85. Collections of true fluctuating revenue rose from Rs. 122 to 138·3 lakhs, the increase being due to timely rainfall, to satisfactory supplies in the canals, both perennial and inundation, to the development of canal irrigation in the Sialkot, Montgomery, Lyallpur and Multan Districts and to more villages in the Gujrat District being brought under fluctuating assessment. The outstanding balance of fluctuating revenue was only Rs. 28,000 at the close of the year.

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OTHER LAND REVENUE.

Demand and collection.

86. Collections of "other land revenue" amounted to 40·3 lakhs or a little over 2 lakhs more than last year, but it is important to remember that 31 lakhs of this represent payments for the sale of Government land, and must be regarded as the realization of capital rather than as recurring income.

MISCELLANEOUS.

87. The favourable conditions of the year are reflected in the number of coercive processes. These fell from 16,129 to 12,430, and no less than 90·5 per cent. of the outstanding arrears were collected. There were no cases of imprisonment, only one sale of immoveable property and only one warrant for its attachment. The Multan Division is again responsible for the largest number of processes, but the figures show an improvement on those of the previous year, and it appears that the special efforts made to enforce punctuality have been largely successful. The experiment of serving revenue processes through the post has been very successful in Gujranwala and is being tentatively extended to other districts. In Lyallpur District the average number of processes issued was rather less than three per lakh of rupees collected as against rather more than six last year. This indicates a satisfactorily high standard of efficiency in collection and is an eloquent testimony to the prosperity of the district.

88. Fifteen new jagirs, 3 of Rs. 1,000 each, 4 of Rs. 750 each and 8 of Rs. 500 each, were granted in recognition of distinguished services rendered in connection with the War, to the administration and in public life.

89. An important experiment with the object of encouraging the cultivation of food-grains has been made by relaxing the rules regarding leases of Government waste land, and a large area has been given out on favourable terms to lessees for two years for the cultivation of such crops.

11.—Professional Surveys.

Surveys.

90. The Punjab Riverain Detachment of the Survey Department carried out riverain surveys on the Indus, Chenab, Ravi and Jumna in connection with the Dera Ghazi Khan, Multan and Ambala Settlements. 977 linear and 1,796 square miles of main circuits and 2,216 linear and 421 square miles of minor traverses were run and 1,359 theodolite stations of the former and 8,535 of the latter were fixed in the area under river action. 748 square miles were demarcated with permanent mark stones on both banks of the Indus and the Jumna to serve as bases for the future survey and demarcation of boundaries and fields in the beds of the rivers. 1,231 plotted and 355 boundary mapping large scale sheets and 31 4-inch sheets were traced and supplied to the Settlement Officers of Dera Ghazi Khan and Ambala. In Kangra 414 traverse stations were computed and plotted on 4-inch sheets. 1,187 plotted *masavis* of tikas, 102 enlarged boundary *masavis* and 18 traces of 18 4-inch sheets were supplied to the Settlement Officer, Kangra. 43·30 miles of road were surveyed in the Kangra District and 55 linear miles traversed. 29 sheets of the main road and 203 sheets of 20 bazars surveyed last year were plotted, typed and examined. The computation volumes of the Simla District were completed during the year. Traversing was undertaken for a 3-inch military survey close to Hatti in the Attock Tahsil and 18 linear miles were traversed and theodolite stations thrown and their heights taken. The total expenditure was Rs. 91,060.

91. A new survey party was formed on the 15th June 1917 for the purpose of undertaking the rectangulation of the Sind Sagar Doab in connection with the irrigation and colonization project for that area and was given a course of preliminary training preparatory to starting field work in the cold weather of 1917-18. During the winter of 1916-17 the Great Trigonometrical Survey sent a detachment to run a series of secondary triangles through the Doab, emanating from the Great Indus Series, which flanks the western side of the area. This series will act as a foundation on which to base the network triangulation now in progress.

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92. Topographical survey operations were continued under No. 1 and No. 2 Parties, N. C., which surveyed an area of 1,679 square miles and 324 square miles, respectively, on the 1-inch scale in Gurdaspur, Hoshiarpur, Kangra and Gurgaon Districts and in the Chamba, Nabha and Patiala States. No. 2 Party also triangulated an area of 125 square miles in the State of Patiala.

Boundary delimitation.

93. A draft bill for compulsory demarcation of a fixed provincial boundary on the Jumna is under the consideration of the Punjab and United Provinces Governments. The long standing boundary dispute between the villages of Nangal-Mubarakpur in District Gurgaon and Lipala and Baloj in the Alwar State was amicably settled during the year. A partial re-demarcation of the Jammu boundary with Sialkot has yet to be carried out. The dispute between Mianwali and Bannu was settled without any alterations in Mianwali District boundary. A block of 93 acres of land was transferred from Lyallpur to Jhang in order to avoid the administrative inconvenience which was caused by the fact that the previous boundary line between these districts passed through the Shorkot Road Railway Station.

12.—Revenue Surveys and Settlements.

94. At the beginning of the year five settlements were in progress and, of these, Simla and Jullundur were brought to completion. The settlement of Dera Ghazi Khan was commenced.

95. The Simla settlement lasted rather more than $2\frac{1}{2}$ years, costing Rs. 26,700, and the enhancement of revenue amounted to Rs. 3,077.

96. In Jullundur, work was completed in $3\frac{1}{2}$ years. The net cost of the settlement was approximately Rs. 4,85,000 and will be recouped in $1\frac{1}{2}$ years from the initial enhancement imposed which amounts to Rs. 3,56,000. The final enhancement will be Rs. 4,88,000 round.

97. The assessment reports of the Nurpur Tahsil of Kangra, of the Kotgarh *ilaqa* of Simla, and of the Rupar and Kharar Tahsils of Ambala District were received and orders passed on them either during the year or shortly after its close.

98. The orders of Government were issued in regard to the period of the recent Lahore and Gujrat settlements. For Lahore the term of settlement in the case of agricultural assessments has been fixed at 20 years, while in the case of urban assessments, both in Lahore itself and in the outlying markets, the term sanctioned is 10 years. The purely fluctuating assessments imposed are liable to conversion into fixed assessment at the end of 10 years. In he villages of Gujrat, which already receive canal irrigation or will receive it within the next ten years, the assessments will run for that period, while in those areas which will not receive such irrigation, either now or in the future, no enhancement of the fixed demand will be made for 30 years. Although no expectation of a longer term than 20 years has been raised in these latter areas, yet, in recognition of the facts that the agricultural tribes of Gujrat, especially in the areas that will not be benefited by the canal, are, as a rule small self-cultivating peasant proprietors, and that large numbers of them are in the army, Government decided to fix a term of 30 years for these areas. In the riverain tracts where deterioration is possible an examination into their condition, with a view to seeing whether a reduction of the demand may be necessary, is to be made after 20 years.

13.—Land Records.

Patwaris.

99. The Collectors of most districts are satisfied with the general conduct and efficiency of their patwaris. Even in some districts, where extra work entailed by the war made it impossible for revenue officers to exercise close supervision over the patwaris, it is reported that there was no resulting falling-off in the standard of their conduct and efficiency. There was a decrease in the number of dismissals during the year from 115 to 111 and in other punishments from 2,593 to 2,336, while good

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work was rewarded by the promotion of patwaris to superior posts in 36 cases as against 17 last year.

100. All the reduced settlement kanungo candidates have been now provided for, and the block in the promotion of patwaris has been thus removed; and it was also found possible to select some of the latter as settlement kanungos after the close of the year.

Kanungos.

101. The work of kanungos is described as satisfactory in all districts except a few. The Director of Land Records thinks that their work is not fully supervised and the Financial Commissioner fully agrees with him. The matter is one which demands constant and unremitting attention on the part of Deputy Commissioners operating through the agency of their Revenue Assistants. The experiment of confining the District Kanungos' tours to tahsil inspections, which was under trial in four districts, did not prove a success, and during the year under report was abandoned with the approval of Government.

Records.

102. During the year settlement work was brought to a close in Jullundur and Simla and revision of records was commenced in two tahsils of Dera Ghazi Khan and in the three southern tahsils of Ambala District. The duration of operations in Kangra has been extended up to 30th June 1918 for the full staff, and up to 31st December 1918 for a reduced staff.

103. The plan of appointing a special official to lay the revenue records or excerpts from them before civil courts is reported to have worked well in the four districts where it was tried, and on the recommendation of the Hon'ble Judges is about to be extended to all districts. The extra cost has hitherto been covered by fees payable by the parties, and the scheme is therefore self-supporting. An essential feature of the scheme is that in some, perhaps in many instances, the courts will, in lieu of examining the original record of rights or attested copies of extracts from them, accept an excerpt or abstract prepared by an official, or take that official's oral evidence regarding the general effect of all relevant entries.

14.—Waste Land and Government Estates.

The Lower Jhelum Colony.

104. The agricultural conditions were, on the whole, fairly favourable on the Lower Jhelum Canal. The kharif harvest of 1916 was, owing to an abundant monsoon, much better than its predecessor; though the winter rainfall of 1916-17 was deficient and the canal supply restricted, the area of rabi sowings exceeded 395,000 acres and only 5 per cent. of this failed.

105. As the conditions of tenure do not provide for the acquisition of proprietary rights, the administration of this colony has special features from which other colonies are free and throws a heavy burden of work on the district staff. The Financial Commissioner has recently reviewed the proposal for the grant of proprietary rights which is being examined by Government. In other directions steps are being taken to reduce colony work, and to bring the administration of the district into line with that of others.

106. The development of the market towns in this colony is still somewhat slow, even when allowance is made for the fact that each serves a smaller agricultural tract than those of the Lower Chenab Canal area, and that the old system, whereby a share of the sale-proceeds of sites was made available for local improvements, has been replaced by grants of a definite amount for the same purpose. The chief problem in all these towns is that of water-supply. The condition of the roads has received attention, and it is hoped that, with the help of the increased grants now provided by Government for the purpose, it will be possible to put them in a satisfactory condition. The need for a more enlightened railway policy is emphasized. The attention of the Railway authorities has been drawn to it, and it is hoped that a more liberal policy will be adopted at the earliest possible opportunity.

107. The remodelling of the Lower Jhelum Canal is in the project stage.

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The Upper Chenab Colony.

108. In the Upper Chenab Colony 57,501 acres have been allotted out of a total allotable area of 79,929 acres, leaving 22,428 still left for distribution. Some 20,000 acres of this are in the Sharakpur Tahsil, and it is evident that this part of the colony must receive attention for some time. In the Jaranwala Tahsil allotment has been practically completed by the distribution of 1,695 acres in compensatory grants to Ravi zamindars, and the southern portion of the Colony may be expected to settle down rapidly. Conditions will not, however, be quite satisfactory till the Colony, which is now spread over two districts, is brought into the new Sheikhupura District, the proposals for which are under the consideration of the Government of India.

109. The revised conditions in these areas of Crown land on the Upper Chenab Canal in the Gujranwala District, which are irrigated in one harvest only, have been given effect to, and it is hoped that they have put matters on a sound basis.

110. The Colony is still defective in village sites and communications and the excessive rains last autumn retarded improvements in this and other respects.

111. A proposal to locate an experimental farm for rice cultivation in the neighbourhood of Kala Shah Kaku Railway Station has been sanctioned. A portion of the tract is famous for a very good quality of rice, and the prospects of development in this direction are hopeful.

The Lower Bari Doab Colony.

112. In the Lower Bari Doab Colony the situation has been so greatly altered by the recent soil survey that the figures of allotable area shown in the Colonization Officer's report are misleading to the extent that they make no deduction on account of the very large area shortage of over 300,000 acres in the culturable area disclosed by the survey which has necessitated considerable modifications of the colonization scheme. Special importance therefore attaches to proposals designed to provide land elsewhere and to bring areas under cultivation. But the main hope of making good the deficiency rests on the hydro-electric project and on the late Mr. Barnes' comprehensive scheme for the reclamation of "bara" land.

113. The result of sales was distinctly satisfactory: 8,570 acres were sold by auction and 6,172 by private treaty during the year at an average price of Rs. 229 and Rs. 219 per acre, respectively. Nine thousand acres auctioned in March 1918 fetched an average price of Rs. 330 per acre—a considerable advance on any previous figure and nearly 50 per cent. above the average of the auctions of the four previous years. The agricultural year in the Lower Bari Doab was a somewhat chequered one. The most interesting fact in the agriculture of the Colony is the great development of American cotton, mainly or entirely of the 4-F. variety which is favoured by the Agricultural Department. The increase in the cultivation of American cotton is encouraging. The popularity of this crop continues to grow and the figures for kharif 1917—American cotton 81,440 acres and Indian cotton 53,380 acres—are most striking. Though both varieties were damaged by the heavy and untimely rainfall at the end of September, the American cotton came much better out of the ordeal than the Indian. The provision of roads appears to be hardly keeping pace with the general development of the Colony, especially in the Montgomery District. It is to be hoped that the substantial grant of 2 lakhs, recently sanctioned by Government for the purpose, will result in considerable improvement during this financial year. In Montgomery District 31 miles of road were completed while the jungle was cleared off some 128 miles, 139 miles were aligned, and 5 miles were metalled, while on 14 miles arboricultural operations were carried out.

114. In the Multan District 65 miles were marked out, jungle clearance was effected on 119 miles, and earthwork was done on 124 miles, while in and beside Khanewal metal was laid on 3½ miles.

115. The new market towns in the Colony promise well: the number of sites of different kinds sold in each of these during the year and the high prices realised indicate the confidence of the public in the prosperity of the

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Colony. Competition was keenest at Mian Channun, where an average of Rs. 2,020 was realised for a bazar site and Rs. 1,741 for a mandi shop. Only Jahanian seems to be at a standstill, but this place will doubtless develop as the cultivation of the southern portion of the Colony advances. Khanewal should also increase in importance now that the Government buildings are practically complete. The constitution of the new tahsil is about to be notified.

116. The new ginning factories at Mian Channun and Okara have been built in accordance with plans approved by the Agricultural Department; in future it will be a condition of the sale of factory sites that the plans must be submitted to the Director of Agriculture for approval.

The Upper Jhelum Colony.

117. Some 32,000 acres out of the total area of the 43,000 available have been allotted on the Upper Jhelum Colony and of the balance only 7,000 acres are commanded by flow. But less than a quarter of the area has so far come under cultivation, as irrigation arrangements have not been completed.

118. Rupees 20,000 were sanctioned for expenditure on roads in this Colony during 1917-18 and a programme has been approved. This, added to the allotment recently made by Government for roads in the Upper and Lower Jhelum Colonies, will enable the local authorities to expedite the scheme for the construction and improvement of roads.

15.—Wards' Estates.

119. The number of estates under the superintendence of the Court of Wards at the end of the year was 41, representing an area of 335,061 acres of land, jagirs of the value of Rs. 3,24,445 and gross assets of more than 262 lakhs. The success with which these estates are administered is shown by the fact that though many of them were encumbered by debt when management was assumed, there is now only one, the Atari estate in Amritsar, in which assets do not show a substantial excess over liabilities. During the year a sum of nearly $5\frac{1}{4}$ lakhs of rupees, or more than a quarter of the total annual income, was invested in the Indian War Loan. The estate of the Nawab of Mamdot, much the largest under the Court of Wards, led the way with an investment of 2 lakhs, while the Kot estate subscribed one lakh. During the year three estates were released after a successful term of superintendence. The most important of these was the Sidhowal estate in Karnal, which in seven years was freed from a debt of nearly a lakh and placed in a sound financial position. Owing to the large investments in the war loan only a comparatively small sum was devoted to the purchase of land. Increased attention is being given to the experimental farms on the Mamdot and other large estates, as by means of these the Court of Wards can set an example of enterprising and economical management to the large land-owners of the province generally. Two wards are going through the Vernacular course at Lyallpur, and it is hoped that the new buildings for the accommodation of youths of this position will attract many more wards to the Agricultural College for a longer period of training, as a couple of years at Lyallpur cannot fail to be of immense value to a youth who will ultimately have to manage a large estate. The wards who are receiving their education at the Aitchison Chiefs' College are doing well, and a report received from the Principal shows that there has been a real improvement in boys of this class within the last generation.

16.—Revenue and Rent-paying Classes.

General.

120. The total area of the province as entered in the revenue records stands at 54·70 million acres. Of this a little over 34 million acres are owned by agricultural tribes, $5\frac{1}{2}$ million acres by others and 15 million acres are divided between common lands, village sites and Government property. There has been an increase, as compared with the figures of last year, of 64,000 acres in the gross and one of 294,727 acres in the cultivated area. The increase in the total area is mainly due to remeasurements at quadrennial attestations and settlements. The increase in

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the cultivated area is mainly due to the cultivation of land given up by the Railway in the Hissar District to the original owners from whom it had been acquired, to the breaking up of waste land owing to favourable rainfall in Hissar, Karnal, Lahore and Mianwali, and to extension of irrigation in Sialkot, Gujranwala and Montgomery. The cultivated area under mortgage has again slightly increased, but the percentage of this to the total cultivated area is the same as in the previous year, 11·5.

Loans under the Land Improvement Loans Act, XIX of 1883.

121. The same amount was advanced for improvement as last year, *viz.*, 1·4 lakhs. Tahsildars in Gurgaon District were instructed to encourage the sinking of wells and to make loans under the Act more popular, and as a result advances in the district rose from Rs. 8,150 to Rs. 24,110. Suggestions for making loans for improvements more generally popular are under consideration.

Loans under the Agriculturists Loans Act, XII of 1884.

122. Owing to favourable agricultural conditions there was a decrease this year in the amount advanced under the Agriculturists Loans Act from 8 to 1·5 lakhs. Advances were mainly given in the districts of Gurgaon, Attock, Mianwali, Montgomery, Muzaffargarh and Dera Ghazi Khan.

Transfers.

123. The cultivated area sold during the year was 107,227 acres, or only 428 acres more than in the previous year when the figures were the lowest for 20 years. Sales of uncultivated land fell from 126,700 acres to 112,314 acres. Nearly half of this latter area was in the Muzaffargarh District and the purchases in that district were probably mainly due, as in the previous year, to the anticipation of the construction of the Sind-Sagar Canal. The total cultivated (ownership) area redeemed during the year amounted to 187,400 acres, or 23,000 acres less than in the previous year. The reduction noticed in last year's report has thus continued. No very definite general reasons for the result can be gathered from the district reports, but doubtless it is partly, at any rate, attributable to war conditions in their economic aspect. Although redemptions have thus decreased, the Redemption of Mortgages Act appears to be slowly gaining in popularity and 2,932 cases, against 2,708 in the previous year, were disposed of under it. The cultivated (ownership) area mortgaged during the year was 219,712 acres, or 7,684 acres less than in the previous year, but some 32,000 acres more than that redeemed during the year. The area transferred by gifts has advanced slightly from 79,600 acres last year to 86,000 acres this year. The area transferred by exchanges was 43,000 acres against 46,000 acres last year. The exchanges were chiefly due to consolidation of holdings—a matter of great agricultural importance.

Value of land.

124. The average recorded price of cultivated land (which, however, includes uncultivated land sold along with cultivated land) has risen from Rs. 216 to Rs. 227 per acre, and there is no doubt that the value of land is steadily rising. The rise is almost general throughout the province and is mainly due to the general rise in the prices of agricultural commodities and, in a probably smaller but still highly important degree, to the popularity with the agricultural tribes of land as an investment. For the province as a whole the sale prices in the year under review represent 157 years' purchase of the land revenue assessed, as against 151 years' purchase in the previous year and 66 times 20 years ago. No better proof could be afforded of the leniency of the land revenue demand and of the remarkable increase of general prosperity within the last generation. The mortgage value of the land mortgaged during the year represents 85 times the land revenue assessment of the land, as compared with 88 times in 1915-16.

Land Alienation Act.

125. No new tribe was notified under the Land Alienation Act during the year. Agricultural tribes gained by purchase a net increase of nearly 21,000 acres against 20,000 acres in the previous year. Sales by agricultural tribesmen fell from 206,529 acres to 182,718 acres, and sales to them fell from 226,226 acres to 203,451 acres, while sales to others fell from 42,700 to 38,000 acres,—the smallest figure for any year since the passing of the Act. The measure continues to command the increasing confidence and approval of the peasantry of the province. In areas

which were in the past permeated with agricultural indebtedness it is regarded as having largely achieved its object and as being the Magna Charta of the zamindar.

Rent-paying classes.

126. The number of suits for enhancement of rent (1,421) and of successful suits of that class (1,267) have fallen by nearly half as compared with last year's figures. It is reported that in several districts, owing to the rise in the prices of grain and in the value of land and owing to new assessments, cash rents show a tendency to rise.

127. In ejectment proceedings, 120 decrees were given against occupancy tenants under section 39 of the Tenancy Act. An increase occurred in the number of applications for service of notice of ejectment on tenants-at-will and the ejectments of such tenants actually made rose from 4,881 to 6,592. No very satisfactory reasons for the increase have been advanced, but a definite tendency to permanent increase is not to be inferred from the figures of one year.

MISCELLANEOUS.

Punjab Land Preservation (Chos) Act.

128. The results obtained in Ambala and Hoshiarpur Districts by the restrictions imposed under the Chos Act are decidedly encouraging and indicate clearly that operations under this Act should be prosecuted diligently and developed. The financial situation prevented extension of operations during the year, but Government has now ordered that further action should be no longer delayed and necessary proposals have been called for. Meanwhile judicious encouragement is being given to any unofficial action likely to contribute towards the desired re-afforestation, and an extension of the practice of making grants to villages for the reclamation of Cho beds is under consideration. The assistance thus afforded is valuable not merely for the tangible results obtained, but also by way of encouragement and as a definite indication that Government is interested in a practical shape. Grants of Rs. 1,000 each to the Deputy Commissioners of Hoshiarpur and Ambala for reclamation and training of Cho beds were made during the year and Rs. 3,000 have been entered in next year's budget for the same purpose.

The Descent of Jagirs Act.

129. No jagir was notified during the year under the Descent of Jagirs Act. The total number of jagirs notified under the Act is 145.

CHAPTER III.

PROTECTION.

Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

Police.—(1) Report on the Police Administration of the Punjab for the year 1917.

(2) Report on the working of the Criminal Tribes Act for the year 1917.

(3) Report of the Chemical Examiner to Government, Punjab, for the year 1917.

Criminal Justice.—Report on the Administration of Criminal Justice in the Punjab and its Dependencies during the year 1917.

Prisons.—Report on the Administration of the Jails in the Punjab, 1917.

Civil Justice.—Report on the Administration of Civil Justice in the Punjab and its Dependencies during the year 1917.

Registration.—Report on the Administration of the Registration Department of the Punjab for the year 1917.

Legal affairs of Government.—Report on the Administration of Legal Affairs of the Government of the Punjab for the year 1917.

Local Boards Administration.—Report on the Administration and Accounts of the District Boards in the Punjab for the year 1917-18.

Municipal Administration.—Report on the working of Municipalities in the Punjab during the year 1917-18.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Statistical Abstract for British India, Volume IV, Administrative and Judicial (including area, population and local funds).

17.—Legislating Authority during the year 1917-18.

130. The following changes took place amongst the members of the Council :—

(1) The Hon'ble Mr. W. F. Holms was nominated in place of the Hon'ble Mr. D. W. Aikman, resigned.

(2) The Hon'ble Mr. C. J. Hallifax was nominated in place of the Hon'ble Mr. P. J. Fagan, resigned on nomination to the Imperial Council.

18.—Course of Legislation during the year 1917-18.

131. Eight meetings of the Legislative Council were held during the year under report at the Government House, Lahore (24th April 1917, 25th April 1917, 6th November 1917, 21st December 1917, 6th February 1918, 7th February 1918, 13th and 14th March 1918).

132. The following Bills were introduced in Council during the year :—

(1) The Punjab Vaccination (Amendment) Bill.

(2) The Restriction of Habitual Offenders (Punjab) Bill.

(3) The Simla House Bill.

(4) The Punjab Municipal Act (Amendment) Bill (regarding imposition of Terminal Tax).

(5) The Simla House Act (Amendment) Bill.

(6) The Punjab Village and Small Towns Patrol Bill.

133. Nos. (1) to (5) were passed while No. (6) was referred to a Select Committee.

134. The Juvenile Smoking Bill which was introduced last year was also referred to a Select Committee.

135. Out of the following seven resolutions—

(1) Resolution regarding fixing of 30 years as the ordinary term for a Land Revenue Settlement in the Punjab,

(2) Resolution regarding improvement of the condition of Primary Schools and the Lower Primary Department and further expansion of Primary Education,

(3) Resolution regarding recruitment of Professors of Anatomy and Physiology in the Medical College, Lahore,

(4) Resolution regarding improvement in the position of the teachers of classical languages in Anglo-Vernacular High Schools,

(5) Resolution regarding amendment of Rule 7 of General Rules for the conduct of business at the Punjab Legislative Council meetings by substituting the word "Urdu" for "English" in the first sentence and *vice versâ* in the second sentence,

(6) Resolution regarding Sanitation,

(7) Resolution regarding deduction and addition of Rs. 3,00,000 from certain budget heads to others,

Nos. (1) and (5) were lost, No. (2) was passed, No. (3) was amended and passed, whilst Nos. (4), (6) and (7) were withdrawn.

136. Three hundred and three questions were put and answered.

INDIA ACTS.

137. No Acts particularly affecting the Punjab were passed by the Imperial Legislative Council during the year.

19.—Police.

GENERAL POLICE FORCE.

General.

138. The number of true cognizable offences of all kinds dealt with by the Police in 1917 was less by 5,585, or 13·8 per cent., than in the previous year in which a reduction of 14 per cent. was shown. Excluding petty offences under local and special laws there were only 24,279 true cases as against 28,977 in the previous year, a reduction of 16 per cent. supervening upon a decrease of 24 per cent. in 1916. The remarkable decrease in crime which set in at the end of 1915 continued throughout the year under review notwithstanding high prices which, it may be added, were set off by high wages and the demand for labour resulting from war conditions. The undoubted prestige of the administration, and the almost universal success with which organized crime, revolutionary and ordinary, has been dealt with from the beginning of 1914 to the present date, have largely contributed to this very satisfactory result. The enlistment of bad characters in the Army, the impression created by the despatch of Convict Labour Corps to Mesopotamia, and the co-operation of the public also continued to operate favourably on criminal statistics. In addition, the registration and restriction of wandering criminal tribes were undertaken for the first time in the history of the Province during the year under review, and the successful operations of the Criminal Tribes Department and District Police in this connection had an excellent preventive effect. Further, the improvement in the organisation and training of the force that has been effected in the past three years, enabling the despatch of emergency forces at a moment's notice from other districts to districts affected by waves of lawlessness, has also simplified the task of stamping out epidemics of crime and has fostered inter-district co-operation which was very defective under the old water-tight compartment system of pre-war days. The co-operation of the public throughout the year has been acknowledged by cash rewards and some much coveted grants of land, while, on the other hand, failure to realise responsibilities in this connection and connivance at disorder have led to the punishment of village officers and the location of punitive posts of which 31 were in existence at the end of the year. This policy has been pursued with strikingly successful results for the past four years, and it is satisfactory to be able to note that, with a few exceptions, a marked feature of the year under review has been a due respect for law and order on the part of the public. Good evidence

PROTECTION.

of this satisfactory state of affairs is furnished by the fact that the great Hindu Dusehra festival and the solemn Muharram mourning of the Muhammadans were carried out side by side in peace and quiet throughout the province.

Murders and dacoities.

139. Murders have steadily decreased, with the exception of a slight relapse in 1916, from 625 in 1913 to 511 in the year under review. There was, however, an unfortunate epidemic of murders in the Shahpur District which was probably due to the encouragement given by poor detective and prosecution results to those anxious to prosecute the blood-feuds for which certain tracts of this district are notorious.

140. There were only 53 dacoities during the year; these figures being the lowest on record since 1910.

Burglaries and thefts.

141 Burglaries decreased from 13,477 in 1916 to 11,047 in the year under review, a result largely due to the registration and restriction of wandering criminal tribes, and the successful working of the *thikri pahra* system of patrolling.

142. Ordinary thefts similarly show a decrease of 846 cases, the figures being 5,753 in 1916 and 4,907 in 1917.

Police working.

143. Detection and prosecution results approximated to the standard attained in the previous year; the all-round percentage of cases convicted to true cases being 32·68 as against 32·70 in the previous year, while the percentage of cases and persons convicted to cases and persons tried was 72·43 and 57·32, as compared with 71·70 and 57·29, respectively, in 1916.

Preventive measures.

144. During the year under report, 2,655 persons were called upon to furnish security under section 110 of the Code of Criminal Procedure, as compared with 3,313 in 1916. The decrease is explained by the drop in crime and the continued enlistment of bad characters in the Army. The recent legalisation of the *thikri pahra* patrolling system and the passing into law of the measure for the restriction of the movements of bad characters will materially strengthen the preventive side of the criminal administration.

Criminal Investigation Department.

145. The Criminal Investigation Department continued to render excellent services to the administration throughout the year. There was little political crime, and in consequence the investigating officers were able to pay considerable attention to ordinary organised crime such as gang dacoities and *barda faroshi* (trade in women) with marked success. They also did useful work in the investigation and prosecution of important bribery charges against public servants. The few political prosecutions which took place during the year were an aftermath of the great conspiracy cases of 1915-16 and were brought to a successful issue. The energies of the department in this field were mainly bent to the surveillance of returned emigrants, some hundreds of whom, including many who had been more or less directly associated with the *Ghadr* movement in America and the Far East, returned to their homes during the year. Twenty-seven of these were temporarily interned and 87 restricted to their villages under the Ingress Ordinance. On the other hand, 28 internees were released, and a large number who had displayed good behaviour during confinement to their villages were freed from all restrictions, the number of persons restricted on probation to their home villages at the end of 1917 being 469 less than a year previously.

Finger Print Bureau.

146. During the year 29,424 references were received by the Finger Print Bureau at Phillaur for search, of which 5,567 were traced, as compared with 29,772 slips referred and 5,738 traced in the previous year. The number of finger impression slips on record at the end of the year was 251,391 as compared with 230,923 in 1916.

Internal economy.

147. During the year the mounted police was re-organized into troops and sections at certain selected centres. Hitherto this force had been merely a collection of mounted orderlies scattered in twos and threes all over the province, but their temporary concentration in 1916 to meet with disturbed conditions in certain tracts showed the superiority of the

troops and section organization which has now been adopted. At the close of the year a small committee was appointed by the Local Government to examine the constitution and working of the Railway Police which had not come under scrutiny in 1914 and 1915 when the Criminal Investigation Department and the general force were re-organized. The Committee's report was presented in the current year and orders have now been passed for the separation of the Railway Police from the Criminal Investigation Department, which in itself is a sufficiently onerous and responsible charge. The old arrangement has been reverted to whereby this branch of the force is placed under a whole-time Assistant Inspector-General assisted by a senior Assistant Superintendent, and the opportunity has been taken to re-organize and re-distribute the whole establishment.

Rural Police.

148. During the year 23 zaildars, 317 village headmen and 277 village watchmen were punished for neglect of their duties connected with the criminal administration, but on the whole the rural police rendered useful assistance to the regular force.

Criminal Tribes.

149. The year 1917 will remain a memorable one in the history of the Criminal Tribes for it witnessed the practical inauguration on an extensive scale of a new policy in dealing with them, a policy which, while continuing and rendering more effective all measures for the protection of society, has for its keynote reform rather than repression. The main principles of this policy were laid down in the report of 1914 of a small committee appointed to consider the subject and are as follows:—

(*i*) A strict and effective, but sympathetic, control over the worst tribes or divisions thereof, where possible through philanthropic bodies, combined with the provision of sufficient opportunity for them to earn an honest living within the area to which they are restricted.

(*ii*) The provision of definite conditions under which members of criminal tribes may, by continued good conduct, individually earn relaxation from restrictions and may thereby contribute towards the ultimate emancipation of the community from the operations of the Act.

(*iii*) Provision for the education of children so as to wean them from their hereditary criminal traditions and open to them fresh fields of thought and occupation.

150. Spasmodic attempts at reform had previously been made and the new policy had been mooted for some years, but until 1917 no organised effort had been made to bring these outcasts from society whose members—men, women and children—are estimated at from 125,000 to 150,000 souls, within the pale of civilization.

151. The scheme now brought into operation under the Criminal Tribes Act, III of 1911, and the rules made under its authority, provides first of all for the registration of all adult male members of notified criminal tribes, whose movements are, as a rule, restricted under section 12 of the Act. Registration is followed by classification and that by distribution, the worst characters being drafted to a reformatory settlement and those less undesirable and comparatively well behaved to Industrial and Agricultural Settlements, while others, constituting the majority, are allowed to remain in their own villages (to the area of which they are for the most part restricted or where they have to report their presence periodically) subject to supervision, with a view to ensuring that they have sufficient remunerative occupation and are kept out of harm's way. The best members of this class are exempted from all restrictions, and their names are struck off the criminal tribes register.

152. In order to effect these objects a strong central agency was necessary and this has been provided by a staff consisting of a Deputy Commissioner, a General Assistant (of the rank of Deputy Superintendent of Police), a Revenue Assistant (an Extra Assistant Commissioner) and

the necessary office staff. The report on the Administration of the Criminal Tribes in the Punjab in 1917 is the first report of the new department.

153. The work done during the year has not only been such as to justify the scheme, but has given rise to great hopes of the ultimate reclamation of the tribes.

154. The first work undertaken was that of registration and, as a result of simultaneous rounding up of the tribesmen throughout the province on specific dates, 10,820 adult male members of wandering gangs and 22,678 of settled tribes were brought on to the books.

155. After classification as described above, those marked down for special treatment were despatched along with their families to the various settlements which have been formed, *viz.*, a Reformatory Settlement at Amritsar, Industrial Settlements at Dhariwal, Montgomery, Shahdara, Bhiwani, Danepur, Chawa and Changa Manga, and Agricultural Settlements at Kot Adhian and Kot Mokhal. Four other settlements have been started since the close of the year. On the 31st December 1917 there were 418 inmates in the Reformatory, 1,223 in the Agricultural and 2,840 in the Industrial Settlements.

156. The Reformatory Settlement may be compared to a hospital and the other settlements to convalescent homes. During the nine months from the date of opening 1,930 persons including 919 registered members entered the Reformatory Settlement and all but 418 were passed on, mostly to other Settlements.

157. Work in these settlements, most of which are new, was attended by very considerable initial difficulties, due to the superstitious and untamed nature of the inmates, but, by sympathy combined with firmness, considerable success has already been attained; conduct has become satisfactory, good wages are earned and the inhabitants are gradually learning the value of leading respectable lives.

158. One very encouraging feature of the settlement work is the response by philanthropic societies and philanthropic business firms to the desire of Government to secure the co-operation of the people in the work of reformation. The Salvation Army, Ahmadiya Anjuman Isha'at Islam, Hindu Sabha, Arya Samaj, Dev Samaj, Anjuman-i-Islamia and Chief Khalsa Diwan have all come forward to undertake the management of one or more settlements; and it is a matter of satisfaction that organisations representing all the four great religions of the Province, Christian, Muhammadan, Hindu and Sikh, are taking a share in this benevolent work. The knowledge that Government is prepared to meet all reasonable expenses of management should encourage an extension of their operations as the number of settlements increases.

159. The initiation of the policy described in the previous paragraphs has involved an expenditure on the part of Government of over one lakh of rupees during the financial year ending on 31st March 1918, and a further considerable increase must be expected as the work expands. It may, however, be fairly claimed that there has already been a handsome indirect return on the money spent. The closer control exercised over the tribes generally, and the confinement of many of the worst criminals to settlements have unquestionably contributed substantially to the general decline in crime mentioned elsewhere, while the moral improvement of the tribes, illustrated by the drop in the percentage of registered members convicted from 10·8 in 1916 to 2·3 in 1917, should, if continued, enable Government in time to reduce its police establishment. Moreover, it is mainly owing to the active interest of the Deputy Commissioner and of his assistants that the army has secured nearly 1,000 recruits from the criminal tribes. It is to be hoped that the desire for military service will spread. There could be no more honourable road to social rehabilitation.

160. In November 1917 a conference was held at Lahore which was attended by representatives of the principal Native States in the Punjab

and of States adjoining its borders. All the States accepted the view that uniformity in the treatment of the criminal tribes was desirable and agreed to take action on the general lines adopted in the Punjab.

CHEMICAL EXAMINER.

161. In spite of the additional work undertaken during the year for the Military authorities the number of cases investigated by the Chemical Examiner dropped from 1,564 in 1916 to 1,427 in the year under review. The diminution was due apparently to the general decrease of crime which was only partially counterbalanced by an increase of articles examined for the Military Department. The references to the Imperial Serologist at Calcutta also show a decrease. Human poisoning cases accounted for 395 out of the 808 medico-legal cases. Opium ousted arsenic from the first place as a poisoning agent, and appeared in 34·8 per cent. of the detected cases as against 27·6 credited to arsenic. The poisoning agent in almost all the cattle-poisoning cases detected was arsenic.

20.—Criminal Justice.

General.

162. During the year under report crime was less than it has been since the year 1913 under both the Indian Penal Code and Special and Local Laws. For this there are several causes, and it is not easy to point to one that is applicable to the whole Province. The main causes of the decrease in crime as reported by various districts are—

(1) Recruiting for the army.

(2) Fear of being sent to the front from the jails.

(3) Registration of Criminal tribes.

(4) Enforcement of the system of village patrols.

(5) Greater co-operation between the Police and the people.

163. The total number of offences reported during the year was 180,819 as compared with 198,832 in the previous year, showing a decrease of 18,013. The number of cases found by the Criminal Courts to be true, *i.e.*, private complaints in which processes issued, and cases prosecuted by the Police, was 114,194, or 63 per cent. of the total number reported, the rest being cases dismissed under section 203, Criminal Procedure Code, or cases in which the complaint was held to be false or frivolous.

164. The number of cases brought to trial, *i e.*, true cases less those dealt with under sections 247 and 259 of the Criminal Procedure Code, during the year was 109,001, and the number of persons involved in them was 249,842, as against 121,034 cases and 283,212 persons in the preceding year.

Disposal of cases.

165. The total number of criminal cases disposed of during the year under report was 178,053, as compared with 201,801 in the previous year, showing a decrease of 23,748.

166. Of the 249,842 persons brought to trial 170,864, or 68·4 per cent., were acquitted or discharged and 64,890, or 26·02 per cent., were convicted. In the previous year the percentages were 70·1 and 24·9, respectively. Of the 170,864 persons acquitted or discharged 74,801, or 43·8 per cent., were discharged in consequence of the non-appearance of the complainant or the withdrawal of the complaint.

167. Under the Indian Penal Code reported offences have dropped from 140,242 to 126,426, and those admitted to have occurred, including offences reported during and pending from the previous year, from 88,571 to 76,781.

168. Of 160,806 persons brought to trial under the Indian Penal Code, 23,330, or 14·5 per cent., were convicted. Of 22,742 persons brought to trial under the Indian Penal Code whose cases were prosecuted by the Police 13,037, or 57·3 per cent. were convicted, but of the 138,064 persons tried on private compl4ints only 10,293, or 7·4 per cent., were convicted.

Serious forms of crime.

169. In the four more serious classes of crime, offences affecting life, robbery and dacoity, theft and the receiving of stolen property, there was a decrease of 10 per cent.

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Murders.

170. The number of persons brought to trial for murder (sections 302 and 396, Indian Penal Code) was 1,048, of whom 402 were convicted, and 192 death sentences were pronounced by Sessions Judges subject to confirmation by the Chief Court. About 68 per cent. of these sentences were confirmed, 16 per cent. were modified and 15 per cent. reversed.

171. In the case of 7 persons the sentences imposed by the Lower Courts were enhanced by the Chief Court to the capital penalty.

172. His Honour the Lieutenant-Governor commuted the death sentence of 5 convicts to transportation for life. His Excellency the Governor-General in Council commuted the death sentence of one convict to 14 years' imprisonment and detention in a lunatic asylum until further orders and the death sentence of 2 convicts to transportation for life.

Bribery cases.

173. The year was remarkable for the number of bribery cases instituted. Notable among these were the successful prosecutions of two Sub-Judges and an Extra Assistant Commissioner. The success which has attended these cases should go far to assure the people of the thoroughness of the effort which is being made to stamp out corruption in the public service.

Matrimonial offences.

174. Matrimonial offences have decreased from 10,000 to 8,723, but the figure is still unduly large.

Miscellaneous.

175. Judged from the point of view of the small number of convictions as compared with trials, it does appear *primâ facie* that more action might be taken under section 203, Criminal Procedure Code, and the Hon'ble Judges consider that more cases would be dismissed under this section if they were heard in the first instance by experienced 1st class magistrates. It is, however, true that many of the infructuous trials of the past year would have met with success but for the facts that the sense of public duty is still small, that even impartial witnesses are not content to tell the plain unvarnished truth, and that discrepancies in the statements of witnesses are caused by what the District Magistrate of Hoshiarpur refers to as the badgering of ignorant rustics by pleaders awake to every technical point. The education of public opinion against crime is only in its infancy and its progress is bound to be slow; until it is much more fully developed it is idle to hope for a high percentage of convictions.

176. It is reported from certain districts, *e.g.*, Lyallpur and Amritsar, that there is some improvement in co-operation by the people in the prevention and detection of crime. Active co-operation is at present seen at its best in the assistance which is rendered by the people in patrolling the village by night. The Hon'ble Judges are confident that the placing of the system of village patrol on a legal footing and its extension throughout the Province will lead to a sensible improvement in the support given by the people to the administration.

177. An Additional Judge was again sanctioned for a portion of the year for the inspection of the work of the Lower Courts. The Hon'ble Judges have no doubt that this regular inspection of courts will do much to eradicate bad habits of work and to instil more method, sense of duty, and confidence that good work will not go unrecognised. As it is not always possible for the Inspecting Judge to visit all courts, the Hon'ble Judges directed local officers to inspect and submit notes on all 1st class stipendiary magistrates whose work the Inspecting Judge is unable to see. During the past cold weather the courts have been inspected by the Inspecting Judge at the headquarters of 20 districts and in 6 sub-divisions. The Delhi Courts were also inspected.

21.—Prisons.

Institutions.

178. The only changes effected in the number and constitution of the jails during the year were the reduction of the District Jails at Jhelum, Mianwali, Jhang and Rohtak to subsidiary status, and the transfer of their populations to jails of concentration, for Military Labour. Camp Jails were opened at Dhariwal and Khewra to overcome the shortage of labour at the Woollen Mills and Salt Depôt, respectively.

179. Plans and estimates for the proposed construction of the fifth Central Jail at Jhelum and the conversion of the Lyallpur Jail into a Borstal Jail were received. Owing to increased war rates, the former work, though still urgently needed, cannot, at the present juncture, be taken up. The second proposal is now not necessary as Government has sanctioned the acquisition of 50 acres of land adjoining the present Borstal Jail for experimental farming purposes with the promise of an Agricultural Staff. The building of a special jail for tubercular prisoners is still under consideration, and steps have been taken to select a suitable site.

Military labour and War work.

180. During the year the two Punjab Jail Corps, raised in 1916 for labour in Mesopotamia, have been kept at full strength by drafts amounting to 2,111 men, making in all a total of 4,538 up to the end of the year. Faridkot, Kapurthala and Bahawalpur Darbars have contributed 14, 35, and 15 prisoners, respectively, from their State Jails, for service with the above Corps.

181. Daily labour has been supplied for several months to the arsenals at Rawalpindi and Ferozepore, and to grass farms and dairies at the above stations, as well as at Sialkot, and to meet other requirements for Military buildings. These demands amounted to fully 1,000 men daily.

Accommodation.

182. The total accommodation decreased from 14,804 to 14,699 owing to new measurements being made of Montgomery and Rawalpindi Jails. Most of the jails have been below strength, but at certain of them there has been overcrowding, according to "Accommodation," due to concentration of prisoners for Military purposes. This overcrowding is in no sense real as the excess numbers have been accommodated in tents and workshops.

Admissions.

183. The number of admissions (17,222) shows a decrease of 16·06 per cent. and the average daily population (14,454) a decrease of 15·51 per cent. This diminution is incidental to the War. The number of convicts remaining at the end of the year of those who received sentence in the North-West Frontier Province was 1,507.

184. Those sentenced to transportation but still remaining in the Punjab numbered 739 against 938 in 1916.

Juveniles and Juvenile adults.

185. Forty-two juveniles were sentenced to imprisonment as compared with 60 in 1916.

186. The work of striving to reform the young criminals confined in the Borstal Central Jail has steadily advanced. Under orders of Government the Jailor was deputed to visit similar institutions in Bareilly and Alipur, and much useful information was gained thereby. The religion of the convicts is being carefully attended to, and arrangements have been made for preachers of different sects to visit the jail on Sundays to preach to the prisoners. Good effects produced by these measures are already noticeable. The labour required for the Dhariwal Camp Jail has been met entirely by this jail and has proved a marked success. Ambulance classes have been continued and with the exception of one lad, all (102) who have appeared for the First Aid Examination have passed. The scheme of extension of conditional release to specially selected prisoners of lengthy unexpired terms has been in operation during the year and has proved advantageous. Fifty acres of land adjoining the jail are being taken up for teaching the elements of agriculture to prisoners of the agricultural class, who form about 60 per cent. of the jail population. A scheme for an expert staff of teachers, both educational and instructional, has been approved and sanctioned by Government. Much war work is being done in this jail in the manufacture of various articles for the Military authorities.

Under-trials.

187. The number of under-trials admitted during the year fell from 21,168 to 19,669, or 1,499 less than in 1916. The average period of detention was much the same as in previous years.

Escapes.

188. Nine prisoners escaped during the year against 18 last year, and 7 of them were recaptured. In all but one, the escapes occurred from outside gangs.

Attempts to escape.

189. A serious attempt at escape occurred at Montgomery during the hour of midday rest on the 29th June. To facilitate resumption of

work the prisoners were kept in the factories. Through the neglect of various officials, a number of prisoners were able to congregate in the compound of one of the workshops, where they organized their arrangements for escape. Fortunately, their doings were observed by certain persons, who speedily frustrated their designs by promptly sounding the alarm.

190. Fetters were imposed for safe custody in 206 cases more than in last year. This precaution was due to the presence of a large number of long-term and dangerous men. Punishments.

191. With certain exceptions the conduct and work of the subordinate and warder staffs have been satisfactory. Staff.

192. A further fall in the number of jail offences shows that the progressive improvement in discipline, commented on in the reports for the last two years, has been maintained. Discipline.

193. There was a decrease in expenditure on guarding and maintenance from Rs. 13,67,711 in 1916 to Rs. 12,42,290, a difference of Rs. 1,25,421. This is due to diminished population, drafts for Mesopotamia, and reduction in the number of District Jails. The average cost of each prisoner's maintenance increased from Rs. 80-11-9 to Rs. 86-14-4 owing to the fact that reduction of establishment could not equalize the decrease in the number of prisoners. Expenditure.

194. The daily average number of convicts sentenced to labour decreased from 15,182 to 12,718. After excluding those unfit from various causes, and those employed on maintenance purposes, there remained 4,189 prisoners available for industrial work. A sum of Rs. 42,0.1 was realized by hire of convicts for out-door work to the Military authorities. Industries.

195. The net profits from Jail Factories show a decrease of Rs. 1,51,038 this year, and this is due mainly to the following causes:—

(*i*) Outstandings amounting to nearly one lakh of rupees at the close of the year.

(*ii*) Large stocks on hand at the end of the year.

(*iii*) Decrease in jail population.

(*iv*) Conversion of certain jails into sub-jails.

For similar reasons the average earnings per head fell from Rs. 15-9-0 to Rs. 6-12-0.

196. The number of prisoners admitted to hospital increased from 13,072 to 14,299, due no doubt to the heavy rains during the year. The average number of sick fell from 556 in 1916 to 545 this year, but the death rate increased from 20·32 to 26·66. There were 5,459 admissions and 14 deaths against 4,642 admissions and 13 deaths in 1916, from malaria, the excessive rainfall being the cause of this increase. Cholera was again absent from the jails. There were, however, two cases of plague. By means of active measures the disease was at once stamped out. Health.

197. There were 279 admissions and 91 deaths from tuberculosis against 164 and 74 in 1916. The increase is due to the want of early diagnosis and general lack of knowledge in methods of disinfection displayed by certain Medical Officers. Measures are being taken to overcome this serious condition of affairs.

22.—Civil Justice.

198. The total number of original civil suits instituted in all courts was 202,893 against 194,864 in the preceding year, an increase of 8,029, of which 6,403 were money suits. Institutions

199. Various causes for the fluctuations in the number of suits instituted in different parts of the province have been noted. It is impossible to estimate with accuracy the effect of any of these causes individually or to balance one against another. Thus, on the one hand, owing to an active recruiting campaign, creditors may hasten to bring claims before the departure of recruits while, on the other hand, those absent on active service cannot be sued.

200. The total number of suits for money or moveable property brought by bankers and shopkeepers against agriculturists rose from 69,721 to 73,558.

201. Although there was an increase of 6,403 in the total number of suits for money or moveable property, the comparative increase in other forms of litigation was slightly greater and the percentage of suits for money and moveable property fell accordingly from 84·9 to 84·7.

202. There was a slight decrease in suits for possession or recovery of immoveable property other than pre-emption suits, but there was an increase of 542 in suits to establish a right to pre-emption, of 124 in suits for specific relief, and of 1,099 in "other suits."

Insolvency Act.

203. Applications for a declaration of insolvency under Act III of 1907 rose from 2,239 to 2,976 or, including those pending from the previous year, from 3,160 to 3,848; of these 1,198 were withdrawn or not prosecuted, against 932 in the previous year; but the number of applications allowed rose from 1,066 to 1,429. Over 98 per cent. of the 2,976 applications made during the year were presented by debtors. The Hon'ble Judges in dealing with the exceptional rise in the figures for the Ferozepore and Gujranwala Districts have recently made certain recommendations to Government in connection with this admittedly unsatisfactory Act. It appears that the agriculturist tends to abuse the Act as soon as he realises the loophole which it has left to the *mala fide* bankrupt.

Value of suits.

204. The value of suits instituted rose from Rs. 3,52,04,216 to Rs. 3,98,31,320, and the average value rose from Rs. 180 to Rs. 196. There was a slight decrease in the number of all suits not exceeding Rs. 50 in value, but an increase in all suits of higher value. While money suits participated in the general decrease of all suits not exceeding Rs. 50 money suits not exceeding Rs. 100 in value rose by 3,281 to 44,099, and those not exceeding Rs. 500 in value by 4,691 to 45,146. These figures may be taken as a true index of the increasing wealth of the Province.

Duration of suits.

205. The average duration of contested suits was 80 days in the year under report and of uncontested suits 40 days, figures which compare favourably with those of other provinces.

Process serving.

206. An improvement in process serving has been achieved by instructions to subordinate courts that substituted service by a process server is not to be effected without a special order from the court issuing the process. It is no longer left to the discretion of the process server to decide whether he shall effect personal or substituted service. In the absence of special orders to the contrary he has to effect service personally, returning, if necessary, again and again to the town or village to effect this object. In addition much closer supervision by Senior Subordinate Judges of the work of process servers is now demanded. The result has been a great increase in personal service of process and a corresponding increase in disposals by the Courts.

Panchayat Act.

207. The Panchayat Act has become a dead letter, even in the few districts where it had shown some signs of becoming popular, since it has become generally known that the *panchayats* have no authority to take up cases referred to them by one party without the consent of the other. Last year the Lieutenant-Governor, after an examination of the results attained, reluctantly came to the conclusion that the Act in its present form had proved a failure owing mainly to the consent of both parties being necessary, and the Hon'ble Judges were consulted in regard to a suggestion that *panchayats* should be replaced by benches of two honorary civil judges with the powers of a munsif of the third class sitting at the headquarters of tahsils and having powers to receive and decide plaints direct and without the intervention of the Munsif. The Hon'ble Judges, however, have recorded their opinion that the time is not ripe for this proposal and consider that the Panchayat Act should be repealed. There is thus no clear course of constructive policy indicated. The principle underlying the Panchayat Act is undoubtedly a sound one and a failure in the first experiment should not be allowed to lead to an abandonment of the principle. It is therefore intended that a committee

composed of members of the Provincial Legislative Council should be formed in order to try to discover some satisfactory solution of the difficulty.

Liquidation proceedings. 208. Apart from banks and companies in purely voluntary liquidation there were 38 banks and companies in official liquidation under the supervision of a court. Most of these are in the hands of a District Judge with head-quarters at Lahore who is endeavouring to expedite proceedings. The liquidation proceedings in connection with the People's and Amritsar Banks were transferred to the Chief Court during the year.

Accessibility to revenue records. 209. Government has now sanctioned the appointment of a Special Kanungo in every district except Simla to assist the Civil Courts in the elucidation of revenue records, and necessary instructions for the employment of this official have been issued to subordinate courts. The system has proved a success in its experimental stage.

Stenographers. 210. Now that stenographers have been sanctioned for a number of District Judges, it is possible in those districts to decide a much larger number of civil appeals than was formerly the case. It is hoped that the system will in time be extended to all districts.

Chief Court. 211. In consequence of the congestion of civil appellate work in the Chief Court it takes about three years for a first or second appeal to come up for hearing by a Division Bench ; unless the number of Judges is increased, much improvement cannot be expected for some time to come.

23.—Registration.

General business. 212. Documents, where registration is compulsory, increased by 1 per cent. in number and 7 per cent. in value as compared with the preceding year. The most noticeable feature of the year, so far as compulsory registration is concerned, was an increase of 7 per cent. in the number and 27 per cent. in the value of instruments of sale and exchange. The increase is partly due to the collapse of many buildings during the heavy rains of the year and the consequent increase in transactions relating to house property.

213. Optional registrations affecting immoveable property (2,922) decreased by 21 per cent. in number and by 61 per cent. in value as compared with the preceding year. In 1916 a single award in Gujranwala raised the total by 10 lakhs and the decrease has, apart from that award, been about 11 per cent

214. The variations in optional registrations affecting moveable property, namely, a decrease of 6 per cent. in number and an increase of 3 per cent. in value, call for no particular comment.

Land Alienation Act. 215. The provisions of the Land Alienation Act are generally well understood, and due vigilance is exercised to prevent their evasion. Mortgages disguised as leases, however, still occasionally escape detection. Direct contravention of the provisions of the Land Alienation Act is now very rare, but it is a common practice for money-lenders to have mortgages executed in favour of agriculturists and to take bonds from the latter.

Income and expenditure. 216. There was an increase of 3 per cent. in income owing to an increase in the value of documents registered, and a decrease of 1 per cent. in expenditure owing chiefly to the fact that the posts of some Sub-Registrars remained temporarily vacant on account of leave or delays in filling up vacancies. The net profit on the operations of the Department was Rs. 2,38,289 as against Rs. 2,25,276 in the preceding year.

23-A.—Legal Affairs of Government in the year 1917.

217. The number of references for opinion disposed of by the Legal Remembrancer was 955 as compared with 1,041 in 1916 and 952 in 1915.

218. The Secretary of State was plaintiff in 14 original suits during the year. Of these, 4 were decided in favour of Government, 1 was withdrawn, whilst 9 remained pending at the close of the year. Of the 4 cases decided in favour of Government, 1 was for possession of land and 3 for recovery of money. The total amount involved was Rs. 19,217. The Secretary of State was defendant in 85 original actions, including land acquisition references. Of the 9 land acquisition cases,

6 were decided and 3 remained pending. The Collector's award was upheld in one and enhanced in the 5 that were decided. Of the other 76 civil suits, 25 were decided in favour of and 14 against Government, 2 were compromised and 35 remained pending at the close of the year.

219. The total amount involved was on account of —

		Rs. A. P.
(a)	Land Acquisition references ...	1,69,261 11 0
(b)	Other cases	3,46,205 9 11
	Total ...	5,15,467 4 11

220. In class (b) above, the total amount claimed in decided cases was Rs. 4,95,319 out of which only the small sum of Rs. 4,477 (including costs) was decreed against Government, whilst Rs. 3,107 was awarded to Government on account of costs in cases in which the plaintiffs remained unsuccessful.

221. The Secretary of State was appellant in 22 and respondent in 36 appeals. Of these, 28 were decided in favour of and 10 against Government, the rest remaining pending at the close of the year. Only one revision case was instituted on behalf of the Secretary of State which remained pending at the close of the year; whilst the five appeals filed on behalf of Government were successful.

222. Government Law Officers appeared in one original criminal trial in the Chief Court which was decided in favour of the Crown and in 36 original trials in subordinate courts. Of these, 1 was withdrawn, 26 decided in favour of and 6 against Government, while 3 remained pending. Out of 1,176 Criminal Appeals in the Chief Court 968 were decided in favour of and 208 against the Crown. In Subordinate Courts 3 appeals were successfully preferred. The Crown was also successful in 125 out of 230 applications for revision, 35 being decided against it. There were 114 miscellaneous cases, all of which were decided in favour of the Crown.

24.—District and Local Boards.

223. The constitution of district boards has undergone no change during the year. Excluding Simla, which has no board in the ordinary sense, there remain 10 districts in the west of the Province where the system of election has not yet been accepted. Government has been steadily pressing for its introduction, but local non-official opinion is still strongly opposed to a system which it fears would aggravate feuds and factions in a tract where these are already prevalent. In 8 out of the 15 district boards in which the election system prevails fresh general elections were held during the past year. One hundred and seventy-five seats fell vacant, out of which 27 vacancies were contested while as many as 14 seats, of which Rohtak accounted for no less than 10, had to be filled by nomination in the absence of any candidate for election. The reports contain varying accounts of the degree of enthusiasm displayed at these elections. In one district 5 vacancies were contested out of 14, the contests were keen and nearly two-thirds of the electorate concerned voted; in another district the only contest which appears to have aroused any fervour appears to have been due to sectarian partisanship; in another district no interest at all was taken in the elections.

224. One explanation given of the frequent lack of interest in elections is that, as membership of the boards is highly valued, only the best and most representative elements, opposition to which could not hope to be successful, are able to secure seats. This explanation, which certainly contains a basis of truth, receives support from the fact that a rival candidate often decides shortly before the poll to withdraw and to leave the vacancy uncontested. At the same time the occasional occurrence of vacancies for which no candidate is forthcoming and which have accordingly to be filled by nomination affords evidence for the opinion expressed in last year's report that the attitude of the rural mind towards election, as now conducted, is one of apathy or distrust. It is possible that in some cases an unsuitable arrangement of electoral circles is responsible. Since the close of the year it has been decided in a majority of districts to increase

considerably the elected and non-official element on the boards and at the same time substantially reduce the number of officials. An opportunity of revising the existing electoral circles will thus be afforded.

225. In the hope that it would be found possible to induce some of the more progressive districts to accept, experimentally at least, non-officials as chairmen of the boards all Commissioners were addressed towards the close of the year and asked to obtain the views of the boards in their respective divisions. But the non-official members of the boards in practically every instance showed a unanimous desire to retain the present arrangement under which the Deputy Commissioner is elected or appointed chairman. Even a suggestion that the official element in the boards might be reduced by the elimination of Tahsildars met with scant support. It is hoped that ere long the adoption of a more self-reliant policy will commend itself to non-official members of at least some of the more progressive boards.

226. Many reports comment favourably on the increasing interest taken by members in the proceedings of the board and on the value of the discussions which take place. There is less unanimity, however, concerning the value of sub-committees. Although most reports indicate that useful work is done by them and the number of sub-committees as well as the number of subjects assigned to them has multiplied during the year, there remain a few districts in which they have not yet proved their efficacy.

227. A satisfactory feature of the past year has been the raising of the local rate to its maximum in no less than 9 districts, with the result that there now remain only 5 districts in the Province in which the maximum rate is not in force.

228. With the local rate raised to its maximum and no early re-assessment of land revenue in prospect many boards must now face the alternatives of new forms of taxation or the more systematic exploitation of existing resources. Increased attention is being paid to arboriculture, to agricultural farms and even to the humble cattle-pound which in many districts yields no small profit to the board. For instance, in Amritsar an income of Rs. 4,492 was derived from cattle-pounds, while the expenditure amounted only to Rs. 1,371. In arboriculture the boards possess an asset of great potentialities, provided it is developed on scientific lines. Satisfactory progress in this direction is manifested in Sialkot where the operations resulted in a nett profit of over Rs. 34,000.

229. The past year was the first in which the system of consolidated grants given by Government to meet the normal variations between income and necessary expenditure was fully established. These grants replace the previous grants for particular services and they are supplemented by development grants allotted by the Commissioner for expenditure in promoting the general development of each district. There is no doubt that, by the introduction of this system, all boards have gained in financial independence and in an increased sense of responsibility towards the problem of providing for the needs of the future. Moreover, the distribution of the money has been placed on a much more equitable basis.

230. The gross income of district boards was Rs. 83,16,600 which exceeded by over $4\frac{3}{4}$ lakhs that of the previous year and was the highest yet attained. Only $1\frac{1}{2}$ lakhs of the increase was accounted for by the local rate, the enhancements in the rate not having had their full effect during the year. The total expenditure of the district boards, after deducting Rs. 65,000 invested in the War Loan by the Rohtak and Jhelum Boards and erroneously classified by them as expenditure, fell to Rs. 71,06,400, being nearly $5\frac{1}{2}$ lakhs less than in the preceding year.

231. Receipts under the head "Education" amounted to Rs. 16,70,000, an increase of about three-quarters of a lakh over last year's figure. Expenditure also rose by one-and-a-quarter lakh to Rs. 25,37,000, the nett expenditure being more than half a lakh greater than in the previous year.

232. Fair progress has been made in the opening of new schools, but it has been found in many districts that a supply of trained teachers and the proper equipment of existing schools are more urgently needed than the opening of new ones.

233. In the Rawalpindi Division all the boards have introduced a system of incremental salaries for their teachers and at the same time have improved the existing rates of pay, while in Shahpur attention is being concentrated on the replacement of hired buildings and the provision of adequate furniture. In Lyallpur the district board workshop provides schools with furniture of better quality than is obtainable at the same price in the ordinary market, and this example is one which other boards would do well to imitate. Female education is receiving attention in many districts. The Attock Board is undertaking a special survey of possibilities in this connection, but the lack of suitable teachers is a factor which appears to deter most boards from drawing up a systematic programme.

234. Income under the head "Medical" rose from Rs. 1,07,510 to Rs. 1,10,875 in spite of a decline of over Rs. 6,000 in hospital and dispensary receipts—a disheartening feature in view of the efforts made to popularize the charging of fees from those who can afford them. Expenditure which had fallen last year from Rs. 7,84,047 to Rs. 7,76,901, owing principally to a reduction in plague charges, increased to Rs. 7,86,998,—a natural result in a year of widespread malarial and other epidemics. The conditions of the year were, in fact, such as to tax the available medical resources of the Province in an unusual degree, and many new projects had to be deferred in the interests of more immediate requirements such as the liberal distribution of quinine and the equipment of temporary itinerating dispensaries.

235. The interest taken by boards in the improvement of agriculture grows year by year, and many districts report the formation of Agricultural Associations working in close co-operation with the board and the holding of exhibitions of improved implements on the occasion of important fairs. A record number of bulls, namely, 206, was supplied by the Hissar Farm to district boards during the year, in addition to which bulls of the Dhanni and Dajal breeds were also purchased by some boards. These large purchases indicate substantial progress in cattle-breeding, and many districts report that much keenness is now displayed by zemindars in obtaining good animals.

236. It is natural that the expenditure of the boards on civil works should have markedly declined during the past year. Nearly all reports allude to the high cost of material and labour and the consequent postponement of all building work other than necessary repairs. Stone metalling for roads has also been difficult to obtain owing to the lack of Railway transport. The result is seen in the fall of expenditure on buildings from Rs. 8,05,486 to Rs. 5,67,545 and on communications from Rs. 18,91,650 to Rs. 14,62,447, these being in both cases the lowest figures of the past five years.

237. Among other enterprises of district boards during the year the interesting entry of two boards into the arena of journalism should not pass without mention. The *Jullundur Gazette* is a monthly periodical financed by the Jullundur District Board and edited by the Chairman with the assistance of the Secretary. It has attained a circulation of 1,800. The District Board *Bulletin* of Lyallpur is published weekly for circulation to members and in schools. Both these newspapers do excellent service in the distribution of reliable news and the suppression of false rumours, and much credit is due to the initiators. Another satisfactory feature of the year is the liberal support given by district boards to the War Loan. Many of the reports are full and interesting, and nearly all afford signs that the members of boards and the public whom they represent are now showing a more lively interest in the problems of rural economy and rural administration.

25.—Municipal Administration.

238. There was no change in the number (100) of municipalities during the year 1917-18, but the constitution of 4 new notified areas at Nurpur, Jakhal, Chuharkana and Dhariwal has brought the total number of these bodies to 104. In accordance with the policy of extending the elective system to as many as possible of the municipalities where it is not yet in force, the circumstances of the 30 committees concerned were brought under review during the year, with the result that, in spite of local apathy and in some cases misgiving as to the possible consequences, it has been decided to introduce or re-introduce election into 8 more municipalities.

PROTECTION.

Where the system of election already obtains, it is seldom, however, that it evokes much interest, and in the majority of cases vacancies are uncontested. In the Jullundur Division only 6 vacancies were contested out of 45, in the Ambala Division 4 out of 33 and in the Multan Division 6 out of 32. The Lahore Division shows somewhat better figures with 9 vacancies contested out of 21. In the minor municipalities elections are generally reported to be conducted without any understanding of the responsibilities attaching to the franchise. Voters are indifferent or ignorant of the effect of their votes on the administration of their towns. They are swayed by personal motives or by the influence of faction. Similar criticisms could doubtless be levelled at elections in small towns in more advanced countries, but they are quoted here as indicating the most serious obstacle to the progress of local self-government and the wider constitutional changes which are now in contemplation. New rules have been passed during the year which provide among other matters for simultaneous elections. It is hoped that these may help to effect some cure for the present apathy by presenting voters through the medium of a general election with an opportunity for a comprehensive review of important questions of municipal administration and teaching them to test the merits of candidates by their attitude towards such questions.

239. In regard to the general attitude of members towards municipal administration, committees are roughly divisible into three broad classes, namely, those in which, owing to the harmony prevailing between members, business is expeditiously and efficiently conducted and initiative and a progressive spirit is often displayed; secondly, those in which public business is hampered because party feelings are rife and personal interests predominate; and, thirdly, those in which the members are so apathetic and dependent on official guidance that little is ever achieved without official stimulus. It is satisfactory that a considerable number of committees can be classed in the first category, though the municipalities in which lethargy or self-interest prevail are still in the majority. Sub-committees are on the whole reported to be doing good work, and there is no doubt that conscientious work on such committees furnishes members with an admirable training in the discharge of civic responsibilities.

240. To the performance of their statutory functions most committees pay on the whole adequate attention. More attention is being paid to the control of food and milk and many useful bye-laws have been passed during the year especially by the municipalities of the Lahore Division. The publication by Government during the year of sets of model bye-laws appears to have encouraged committees to take action in this direction.

241. The number of municipalities possessing non-official chairmen was 14, 2 of them being nominated. The increase in the number of non-official chairmen has the hearty approval of Government, while in several cases, where the Deputy Commissioner or other official is still chairman, the policy is being adopted by him of intervening less and less in municipal affairs. The reports of Commissioners indicate that excellent work is being done by many non-official gentlemen as Presidents, Vice-Presidents or Honorary Secretaries of municipal and notified area committees. In order to alleviate the distress in towns caused by high prices, many committees opened shops for the sale of cheap grain and salt to the poorer classes, and the management of these afforded individual members the opportunity of displaying much public spirit and administrative ability.

TAXATION.

242. Income from taxation during the year rose by more than $2\frac{1}{4}$ lakhs to Rs. 47,24,000 following on a rise of more than 2 lakhs in the previous year, while the incidence of taxation rose from Rs. 2-12-6 per head to Rs. 2-14-8. Octroi receipts at Rs. 41,81,000 account for nearly 2 lakhs of the increase. During the year an Act (IV of 1918) was passed providing facilities for the imposition of a terminal tax in municipalities in the Punjab, and as the Railway authorities have consented to undertake collection on behalf of municipalities in return for a percentage of the receipts by way of commission, it is hoped that all municipalities will now apply themselves seriously to the problem of considering whether this

form of taxation cannot be substituted for octroi. Government is contemplating the provision of expert assistance in the matter should a sufficient number of committees desire to avail themselves of it.

26.—Military (Indian Defence Force).

243. The year under review brought with it important changes by the passing of Act III of 1917 which brought into being the Indian Defence Force on the 1st April 1917, thereby abolishing the old Indian Volunteer Force which had been in existence for a period of sixty years. The old Volunteer Force formed the nucleus for the new Indian Defence Force on to which it was grafted, but as the new Act made it compulsory for all British-born subjects to belong to the Indian Defence Force, unless medically unfit, exempted, or overage, many individuals who had not been interested in or belonged to the Volunteer Force, were enrolled under the rules of the Indian Defence Force.

244. There were one mounted and three unmounted Indian Defence Force units in the Province, namely,—

The 5th Punjab Light Horse, the 4th Simla Rifles, the 3rd Punjab Rifles and the 1/24th North-Western Railway Battalion, Lahore.

245. The 5th Punjab Light Horse contributed another 56 members to the Indian Army Reserve of Officers during 1917 and 5 to the commissioned ranks of the Regular Army in England. There are no less than 112 members of this unit serving in the Indian Army Reserve of Officers, the majority of whom are on service abroad.

246. The 4th Simla Rifles has at present a total strength on active service of over 200. The majority of these have obtained Commissions in the Indian Army Reserve of Officers, while some were appointed to Sergeantships in the Supply and Transport Corps and to civil appointments. The number of men in the commissioned ranks is 143 and in non-commissioned ranks 36. The number serving overseas in Mesopotamia, Egypt, etc., is 24.

247. The North-Western Railway Battalion has contributed a considerable number of men for active duty in the various theatres of the war. Six members of this corps have obtained commissions in the British Army since the commencement of the war and 32 in the Indian Army Reserve of Officers.

248. Under the old Volunteer system the strength of the Punjab Volunteer Rifles aggregated 1,306 all ranks on 31st March 1917. The new Act introducing compulsion was expected to increase this number by the enrolment of all those who were non-volunteers. This anticipation, however, was not fulfilled as not only did many who were keen Volunteers have to resign through medical unfitness, but many more were exempted from service; further the new Act did not admit of individuals who were already serving in various branches of the regular forces belonging to the Indian Defence Force. The actual strength of the battalion fell during the year under report to 822 of all ranks on the 31st March 1918.

249. The battalion found 3 officers and 51 non-commissioned officers and men for service with the general service battalion at Poona, which was raised at that station and Madras for the purpose of relieving other units for service at the front. During the year the non-commissioned officers and men of the Machine Gun section, which was sent out to East Africa in September 1914, returned to India. Those who had completed their term of engagement were discharged from military service and resumed their civil duties, while the others who had been sent out as reinforcements and had not completed their service were posted to the Machine Gun centre at Mhow. At the close of the year under report the numbers of the Indian Army Reserve of Officers from the battalion had risen to 94 and the total on active service to 324.

250. An attempt was made during the year to recruit a battalion 1,000 strong from the Indian urban population of the Province for purely local service in the non-European section of the Indian Defence Force, but the response was very disappointing, only 150 fit men being enrolled. The training of these men was completed after the close of the year.

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

Agriculture.—(1) Report on the Operations of the Department of Agriculture, Punjab, for the year ending 30th June 1918.
(2) Annual Report of the Punjab Veterinary College, Civil Veterinary Department, Punjab, and the Government Cattle Farm, Hissar, for the year 1917-18.
(3) Report on the Land Revenue Administration of the Punjab for the agricultural year ending 30th September 1917.
(4) Report on the working of Co-operative Societies for the year ending 31st July 1918.

Fisheries.—Report on the Department of Fisheries, Punjab, for the period 1st June 1917 to 31st May 1918.

Weather and Crops.—(1) Report on the Weather of the Punjab for the year 1917-18.
(2) Punjab Season and Crops Report for 1917-18.

Horticulture.—Report on the Lawrence Gardens, Lahore, for the year 1917-18.

Forests.—(1) Progress Report on Forest Administration in the Punjab for 1917-18.
(2) Progress Report on Arboriculture in the Punjab for the triennial period 1914-15 to 1916-17.
(3) Report on the Administration and Accounts of the District Boards in the Punjab for the year 1917-18.
(4) Land Revenue Report, as above.

Manufactures.—Report on the working of the Factories Act in the Punjab during the yaer 1917.

Trade.—(1) Report on the Internal Trade of the Punjab by Rail and River for the year 1917-18.
(2) Report on the External Land Trade of the Punjab for the year 1917-18.
(3) Report on the Joint Stock Companies in the Punjab for the year 1917-18.

Public Works.—Administration Report of the Public Works Department, Punjab, Buildings and Roads Branch, for the year 1917-18.

Irrigation.—(1) Administration Report of the Public Works Department, Punjab, Irrigation Branch, for the year 1917-18.
(2) Land Revenue Report, as above.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Agriculture.—Statistical Abstract for British India, Volume I, Commercial Statistics.

Forests.—Statistical Abstract for British India, Volume II, Financial Statistics.

Crops.—(1) Agricultural Statistics of India, Volume I, Tables II and III.
(2) Estimate of Area and Yield of certain principal Crops in India.
(3) Prices and Wages in India.
(4) Variations in Indian Price Levels.

Mines and Quarries.—(1) Statistical Abstract for British India, Volume I, Commercial Statistics.
(2) Records of the Geological Survey of India, Volume XLVII, Part 3.
(3) Report of the Chief Inspector of Mines in India.

Manufactures.—Statistical Abstract for British India, Volume I, Commercial Statistics.

Trade.—(1) Inland Trade (Rail and River borne) of India.
(2) Statistical Abstracts for British India, Volume I, Commercial Statistics.

Railways.—Administration Report on Railways in India for the year 1917-18.

Irrigation.—Statistical Abstracts for British India, Volume I, Commercial Statistics.

27.—Agriculture.

General.

251. In May last the Department of Agriculture and Industry was divided under two Directors, Mr. Townsend retaining charge of Industries and additional duties of the directorship of Civil Supplies, while Mr. Joseph was appointed Director of Agriculture.

252. Mr. Roberts, Principal of the Lyallpur College, was on deputation with the Indian Cotton Committee for about 7 months, when Mr. Wilsdon, the Agricultural Chemist, acted for him. Three new assistant professors and three demonstrators were added to the staff of the college owing to its affiliation to the University.

The Lyallpur College.

253. The 1917-18 session opened with 82 students on the roll, 38 in the first year, selected from among 150 applicants, 34 in the second year and 4 and 6 in the third and fourth years. The Rural Economy Class for Revenue and Irrigation Officers could not be held owing to the Principal's absence, but the six months' Vernacular Course was held as usual, while another new class for selected Vernacular Middle School teachers, who may be able on their return to their schools to impart something of the spirit of modern agricultural science to their pupils, was opened. This is an interesting experiment and gives promise of useful results. A second Vernacular Class will be started at Gurdaspur as soon as more staff is available, and meantime arrangements are being made for erecting a *Serai* there, on which accommodation the new Vernacular Class students will have first claim while the building will also provide much-needed accommodation for visitors to the experimental farm.

Experiment and Research.

254. Various important chemical problems continued to receive attention and arrangements are now in train to start reclamation work on "Bara" land near Montgomery. In the domain of Economic Botany important work has been done on wheats and cottons. In wheats there is a possibility that a new type 8 A, a bearded wheat with good hard amber grain, will oust Punjab 11, at present the most popular variety in the Canal Colonies, but definitive experiments are still to be made. Further, the Economic Botanist's work on ear-cockle in wheat has brought him to the conclusion that clean seed is the complete remedy to eradicate the disease which has been doing great damage to the crop in various places.

Implements, Demonstration work and Well-boring.

255. (*a*) *Implements.*—Owing to the restrictions on import of machinery and to the further advance in prices, only 725 imported implements were sold as against 1,863 in the year preceding the year under report. On the other hand, 306 simple "Bar harrows," manufactured at Lyallpur and sold below cost price, have been disposed of as also 132 Lyallpur drills and 59 Lyallpur hoes. Much useful work has been done by the agricultural staff in designing new implements.

256. (*b*) *Demonstration.*—A useful advance is the provision of small demonstration plots which are being started in Gurdaspur and Montgomery to be worked through co-operative credit societies by the zamindars themselves under the guidance of the agricultural assistant of the district. Successful adoption of new methods by the zamindar himself carries conviction to the mind of his brother farmers quicker than their demonstration on a Government Farm. Similarly short loans of agricultural implements to the people themselves are more productive of results than demonstration at fairs, though the latter method was also adopted. In the Gurdaspur circle about 614 implements were lent out in the year. Another method of popularising these novelties has been adopted in sending itinerating parties through the villages to work them.

257. (*c*) *Well-boring.*—Here again advancing prices, increasing difficulty of obtaining material, restriction of goods traffic and the demands of Mesopotamia have all contributed to a reduction of well work, but it is satisfactory that the percentage of success rose to 74·4, or 4·1 higher than in the previous year.

Chapter IV.

PRODUCTION AND DISTRIBUTION.

STORAGE AND DISTRIBUTION OF SEED, POSTING OF COTTON PRICES AND COTTON AUCTIONS.

Cotton.

258. The figures in acres under 4 F American cotton for the year under report as compared with the year immediately preceding it are as follows :—

		1917.	*1918.*
Lower Chenab Canal Colony	...	120,000	190,000
Lower Jhelum " "	...	11,500	16,000
Lower Bari Doab " "	...	80,000	173,000
Chunian Colony ...	...	3,500	10,000
Upper Jhelum Canal Colony	...	...	1,000
Total	...	215,000	390,000

259. Of the above it is estimated that 80 per cent. is practically pure. The growth on the Lower Bari Doab Colony is especially remarkable. Bombay cotton prices were posted at 18 markets. The information thus published appears to have facilitated the securing of full value of the crop. Twelve cotton auctions were held by the department and two by private societies at which about 120,000 maunds cotton, valued at roughly £150,000, was sold. The inauguration of private sales is a most gratifying feature.

Wheat

260. The area under pure Punjab 11 is estimated to have more than doubled itself as the following figures in acres will show :—

		1917.	*1918.*
Lower Chenab Canal Colony	...	60,000	100,000
Lower Jhelum " "	...	22,000	45,000
Upper Bari Doab " "	...	15,000	50,000
Upper Jhelum " "	...	...	1,480
Total	...	97,000	196,480

261. It is estimated that at least another 750,000 acres with not more than 10 per cent. impurity were grown.

262. Pusa 12 wheat continues to be a most popular wheat in the Sialkot, Hoshiarpur and Jullundur Districts. For the next year a lakh-and-a-half rupees has been advanced for purchase and distribution of seed through the Department.

Sericulture.

263. Sericultural work has further expanded, 921 ozs. of seed having been distributed by the Department alone as against 700 last year; owing to the high prices the silk now fetches, the rearer realised on an average Rs. 21-1-0 against Rs. 15-11-0 per oz. in the preceding year. The improvement of sericulture as a cottage industry depends to a great extent on the provision of mulberry towards which but very slow progress has been made. The whole question is, however, receiving consideration and the provision of a separate staff for the expansion of this line of work has been proposed.

CO-OPERATIVE SOCIETIES.

264. The year has been essentially one of expansion and experiment, but the work of consolidation has also been vigorously pushed forward. The number of Government Inspectors was increased by 3 to 22 and, with an adequate staff well trained, it has been possible to bring about marked improvement. Many more unsatisfactory members were expelled and many of the old loans were properly dealt with. In spite of a kharif, spoiled by excessive downpour and a rabi seriously handicapped by the failure of the winter rains, nearly 51 lakhs of rupees were collected as shares, principal and- interest.

Central Institutions.

265. What will probably prove to be the outstanding feature of the year was the formation and registration of the Punjab Co-operative Union, Limited. This is a combination of all Central Banks and Banking Unions which elect representatives in proportion to the number of primary

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societies affiliated to them. It thus represents the whole body of co-operators in the Province and though, at first, its business will be to administer the audit fund, it will probably develop into a factor of importance in the rural development of the Punjab.

266. A new Central Bank was opened at Murree and a Central Weavers' Co-operative Stores was successfully founded. In spite of the war loan campaign transactions between Central Banks and societies increased by 10·8 lakhs to 33·5 lakhs. The Central Banks now own as shares and reserve fund 26·5 per cent. of their total liabilities.

267. Two new unions were formed. The unions are now, with few exceptions, placing all their profits tc reserve. On the whole the central institutions have done a good year's work and are rapidly increasing their financial stability.

Agricultural Societies.

268. Six hundred and forty-two new societies were registered during the year and 122 bad societies were cancelled, leaving a net increase of 520. Two new types of society have been introduced, one having share capital returnable after ten years, but profits indivisible for ever, and the other a pure Raiffeisen society, with no share capital and with profits indivisible. Some old societies also have agreed not to divide profits and in other directions the evil of profit seeking is being eradicated. The total paid-up share capital has not increased much, as though 6 lakhs more were paid up, 2½ lakhs, representing the shares of expelled members, were transferred to deposit or returned, and 1½ lakhs were returned to members of 49 societies which had completed their first ten years. The reserve fund has increased by 5·4 lakhs to 37·4 lakhs, and 8·6 lakhs were earned during the year. The capital owned by societies is over 88 lakhs and forms 64 per cent. of their working capital. The net indebtedness of members to depositors, etc., has declined from 43 to 37 lakhs. The members are thus rapidly becoming self-supporting so far as capital is concerned.

269. Of 33 lakhs advanced to members, 23 per cent. was for cattle. This brings out once more the great importance of developing some system of thrift whereby the people can be encouraged to save in order to meet these inevitable expenses. Cattle insurance is the obvious method and attempts are being made to introduce this. Altogether 31·5 per cent. of the sum advanced (or 11 lakhs) was for objects for which *takkavi* loans could have been obtained from Government under the Agriculturists Loans Act. Repayment of old debt continues to be a prominent cause of borrowing. The most frequently recurring object of loans is land revenue; this is probably due to the desire of the people to gain time to sell their crop to the best advantage. Nearly 32·5 lakhs principal was repaid during the year.

Co-operation in agriculture.

270. The year saw much progress achieved in securing closer association with the Agricultural Department. Ten of the staff underwent a six months' course in practical agriculture, and over 100 visits were paid by the staff to the farms at Lyallpur and Gurdaspur. All the visitors received a week's training. The societies have sold 1,000 improved implements in two years. 1,916 maunds of wheat seed, 165 maunds of cotton seed and over 4,000 maunds of chari seed were obtained from the Agricultural Department and distributed. Arrangements have been made for storing several thousand maunds of improved wheat seed for autumn sowing. Demonstration plots have been started in 18 villages. Thirty-one cotton sale societies have been started, the members of which bind themselves to grow only pure American cotton and to sell the produce co-operatively. Three ghi societies supply pure ghi.

Co-operative Supply.

271. Eight agricultural supply societies have been started and the ordinary credit society has begun to supply its members with seed, salt, oil, etc. Over 28,000 maunds of salt, 13,000 gallons kerosine oil and 6,000 maunds seed were thus distributed and a large saving was effected. The societies also purchased 142,000 tablets of quinine for the benefit of their members.

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Non-Agricultural Societies.

272. Industrial societies continue to be much hampered by war conditions, but steady progress is being effected. The sales of Weavers' societies increased from Rs. 67,000 to Rs. 1,30,000.

Miscellaneous.

273. Forty-five per cent. of the societies have been classified as good as compared with 37 per cent. last year, and the proportion of bad societies has declined from 23 per cent. to 16 per cent. Careful enquiries into the work of old societies prove conclusively the great good that is being steadily achieved.

Veterinary and Live Stock.

General.

274. The year 1917-18 was, like that which preceded it, remarkable for the excess of the monsoon rains and the consequent high mortality among cattle. The prevalence of surra among equines and of hæmorrhagic septicæmia and blackquarter among bovines threw a heavy burden upon the Civil Veterinary Department, already under strength owing to the demand for officers by the Army Department. The number of reported deaths from contagious diseases was 30,085 or slightly less than in the preceding year. No less than 1,362 deaths from surra against 128 in 1916 were reported. Measures for the prevention of this disease as well as for securing that its presence is promptly brought to notice have recently been considered by conferences convened for this purpose and their recommendations are now under the consideration of Government. The examination of animals suspected of dourine resulted in the detection of 10 cases. In view of the widespread extent of this highly dangerous disease, the Dourine Act has been extended to the whole Province, and the Lieutenant-Governor has recently recommended the amendment of the Act so as to confer more drastic powers on veterinary practitioners and inspectors.

275. Among bovines, 26,153 deaths occurred from contagious diseases against 27,795 in the previous year. There were 8,495 deaths from rinderpest, 13,445 from hæmorrhagic septicæmia, 1,295 from foot and mouth disease and 2,609 from blackquarter against 15,045, 10,705, 512 and 1,087, respectively, in the previous year. The total number of animals inoculated and vaccinated was as follows:—

Year.	Anti-rinderpest inoculation.	Hæmorrhagic septicæmia		Vaccinations against black-quarter.
		Preventive inoculations.	Preventive vaccinations.	
1917-18	66,199	29,786	33,771	2,987
1916-17	81,105	18,698	36,971	2,623

Veterinary College.

276. Owing to war demands the staff of the College continued under strength throughout the year. The number of students admitted was 85. Of these 26 only were from the Punjab, while 29 were from the army and 23 from other provinces and Native States. Two hundred and fourteen students appeared in the various annual examinations, exceeding last year's number by 11. The results of the examinations were most satisfactory. It was, owing to the war, impossible to hold the post-graduate class. The number of in-patients and out-patients treated in the hospital attached to the College shows little variation from the previous year.

Hospitals.

277. The number of veterinary hospitals in the province increased by 5 and is now 127. The increasing value and popularity of these institutions will appear from the fact that the total number of animals treated during the year was over 360,000 against an average of 146,000 in the quinquennium ending in 1910 and only 30,000 in the quinquennium ending in 1905.

Cattle breeding.

278. The Department is steadily working for the improvement of cattle-breeding and there are now 1,087 stud bulls at work in the

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Province, an increase of nearly 10 per cent. on the figures for last year. The majority of additions during the year were Hissari bulls, the popularity of the Dhanni bull being more or less restricted to the districts nearest to its home.

GOVERNMENT CATTLE FARM, HISSAR.

279. The Hissar Cattle Farm suffered seriously from the excessive monsoon rains of 1917 and the consequent severe visitations of blackquarter, foot and mouth disease, hæmorrhagic septicæmia and rinderpest. Surra made its first appearance in the farm and is suspected to have spread from some of the camels of the 2nd Government Camel Corps. The farm showed a profit of Rs. 43,181 on the year. Among the most noteworthy features of the year's working should be mentioned the disposal of 100 cows at Rs. 300 each to a representative of the Brazilian Government and the distribution of 206 bulls to Punjab District Boards, a higher number than in any previous year, and the realization of Rs. 3,123 for wool, the quality of which drew special commendation from the Cawnpore Woollen Mills, Limited. The substantial addition which has been made to the fodder reserve is also satisfactory, especially in view of the present year's shortage.

27-A.—Fisheries.

280. The Kangra fishing regulations are working satisfactorily. The minimum size of mesh of net has been reduced from 1¼ inches to one inch square on the condition that fish of certain species below 12 inches in length should not be caught. The result is being watched carefully. Fishing regulations for Gurdaspur, Jullundur, and Amritsar have been published in the *Punjab Gazette* for criticism and are shortly to become law.

281. A new experimental tank has just been made at Sirkian, but has so far not been used. The carp experiments at Madhopur have not been successful. The mural spawned, but owing to various adverse circumstances casualties were enormous. Some fry were sent out for stocking tanks at Khaur and Fort Munro.

282. Trout cultural operations in Kulu were very successful and a larger number of fry was produced this year than ever previously Three thousand ova were planted in a tributary of the Ravi in Chamba and have hatched out successfully. Thirty thousand ova have been planted in two streams in Kangra proper this year, of which 18,000 have hatched out. Thirty thousand ova were sent to Garhwal on payment Ten angling licenses were issued in Kulu. The sport obtained by anglers appears to be good.

28.—Weather and Crops.

Character of the season.

283. The period of winter and spring rainfall preceding kharif 1917 was one of the driest on record, the total amount of rain from December to March being 75 per cent. short of the normal. No moisture for kharif sowings was consequently left by the rainfall of this period. In April and May 1917, however, the weather was abnormally wet and fairly heavy rains, sometimes accompanied by hailstorms, fell at intervals all over the province. The monsoon appeared on 2nd June, some three weeks before the average date, and gave abundant rain almost everywhere. It was abnormally active in August and September, and the total rainfall during these months was much above the average in all parts of the province. The monsoon disappeared about 25th September, some ten days later than usual. A feeble disturbance of the cold weather type gave a few isolated falls in the beginning of October. During the rest of the month the weather was dry except for a short interval at the end, when a severe storm caused a heavy rainfall in the eastern half of the province, the western half remaining generally drier than usual. November was rainless, December, January and February were practically dry except for a few light showers. Light rain fell in the beginning of March in the greater part of the Province, followed in the second half of the month by

heavy rain in the central and submontane districts and moderate rain elsewhere. Some rain also fell accompanied by hailstorms in the first half of April. In the second half of the month and the whole of May the weather was generally dry and clear.

284. The rainfall of April and May helped the sowings of cotton and sugarcane. The monsoon rains were excessive and the sowings of the other kharif crops were much hampered thereby, especially on low-lying lands. The heavy rains of August and September and the resulting floods seriously damaged the standing kharif crops. Further damage to these crops was done in the eastern half of the province by the rainfall of October. The excessive monsoon rains, though, in some places, they hindered the necessary cultural operations, left a sufficient moisture for the sowing of rabi crops. The sowings of these crops were also helped by the rainfall of October. The dry weather of November and December facilitated the picking of cotton and other kharif harvesting operations. The partial failure of the winter rains did not do much harm owing to the moisture left by the previous rains. The rainfall of March did much good to standing rabi crops, especially to those that had been sown late. That of April which was accompanied by hailstorms and high winds did some damage, though not considerable, on some low-lying lands, especially in the Multan Division. On the other hand, it was of distinct benefit to the crops of the North-West Punjab where harvesting starts at a much later date than in the rest of the province. The dry and clear weather of the second half of April and nearly the whole of May was favourable for the rabi harvesting operations.

285. The water-supply in canals was sufficient and river floods were high.

286. The sown area increased by 4 per cent. as compared with the preceding year and by 17 per cent. as compared with the normal. The matured area increased by 3 per cent. as compared with the former and by 19 per cent. as compared with the latter. Thus, so far as area is concerned, the year under review was better than the preceding year. Sown and cropped areas of the year.

287. Owing to heavy rains at the sowing time of both kharif and rabi, irrigated sowings decreased from 40 per cent. of the total in 1916-17 to 35 per cent. in the year under report. Of the total irrigated area 7,682,235 acres or 67 per cent. were watered by Government canals and the rest by private canals or from other sources. Irrigated area of the year.

288. The total area under wheat rose from 9,467,240 acres to 9,925,795 acres—an increase of 5 and 16 per cent., respectively, over the last year's area and the normal. As already stated, the season was favourable for spring crops notwithstanding some delay in the coming of winter rains, and the total outturn of wheat, as given in the final forecast (revised in cases where districts have reported amended figures of area), was 3,240,164 tons or 25 per cent. above the normal, irrigated 26 and unirrigated 23 per cent. above that standard. Chief staples.

289. The outturn of the other principal crops as compared with the estimated normal outturn is given below:—

Name of crop.	*Total outturn in percentage on estimated normal.*
Rice	157
Barley	134
Jowar	30
Bajra	95
Maize	74
Gram	190
Rabi oilseeds	107
Sugarcane	159
Cotton	85

290. Prices were higher than in the preceding year. Owing to an increased export demand the average price of wheat rose from Rs. 3-10-0 to Rs. 3-15-0 per maund. There occurred a remarkable rise in Prices.

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the average price of cotton, *viz.*, from Rs. 8-10-0 to Rs. 12-1-0 per maund, due to the failure of the crop in kharif 1917 and an increased demand for export. The price of jowar rose from Rs. 2-14-0 to Rs. 3-7-0 per maund and that of maize from Rs. 2-10-0 to Rs. 3-2-0 per maund. The rise in the prices of other crops was not so remarkable.

Trade and Stocks.

291. Exports of wheat and gram were heavier in the year under report than in the last year. Owing to the good harvest the imports of rice and sugar were less. Stocks of food-grains are generally sufficient. In Ambala and Lyallpur stocks are said to be held up in expectation of a further rise in prices.

29.—Horticulture.

Lawrence Gardens, Lahore.

292 During the year under report weather conditions were unfavourable and this resulted in an abnormal decline in the income from garden produce. This deficit was however balanced by a reduction of over 8 per cent. of the total expenditure of the previous year. Nearly half the total expenditure, which amounted to Rs. 33,403, was incurred in improving the ornamental aspect of the gardens.

293. A further steady advance was made in the work of beautifying the mounds and lawns.

294. The number of students attending the arboricultural class was 31 which represents a large increase on the number (22) who attended last year. This is a clear indication of the value and popularity of the training which this class provides. Out of the above number, 10 men were sent by local bodies.

30.—Forests.

Alteration in area.

295. The area controlled by the Forest Department was reduced by 137 square miles to 7,074 square miles, the decrease being chiefly due to the disforestation of irrigable land for colonization purposes. The classification of the forests is now as follows :—

				Square miles.
Reserved	...	...	...	1,749
Protected	...	...	...	4,169
Unclassed	...	...	...	793
Leased	...	...	...	363
		Total	...	7,074

296. The actual area under forest growth underwent little or no reduction since most of the areas surrendered were classed as waste lands.

Forest Settlements.

297. No new areas were finally settled during the year, but 120 acres in Kulu were proposed for reservation. Good progress was made with different works connected with the Kangra Forest Settlement which is expected to be completed next year. The revision of the settlement of the Sutlej Valley forests of the Bashahr State was continued and very nearly completed, but in view of the Inspector-General of Forests' recommendation that the work should also be extended to all high-lying fir and blue pine forests not hitherto demarcated, its completion was held in abeyance pending receipt of Government orders on the subject.

Working Plans.

298. The revision of the Working Plans for Kangra and Kulu was continued and considerable progress made.

299. A scheme for the working of the brushwood forests in the Lower Murree Range of Rawalpindi West Division was drawn up and will be brought into operation next year. Browsing schemes for the 52nd and 57th Silladar Camel Corps were sanctioned during the year as also the scheme for the permanent provision of browsing for the silladari camels on the line of march.

Chapter IV.

PRODUCTION AND DISTRIBUTION.

Protection.

300. The total number of forest offences reported was less than last year and the average of three preceding years by 1,559 and 2,070, respectively. Half this decrease occurred under the head "unauthorized fellings" and was attributable to extension of cultivation in Multan and to the opening of old *trihais* in Kangra. The total area of forest burnt was 11,796 acres as compared with 3,999 acres in 1916-17. The fire season of 1917-18 was a successful one in spite of a light rainfall. In Kangra alone, where 6,525 acres were burnt, was there any deliberate incendiarism. For the third year in succession the inhabitants of Rawalpindi District have co-operated in protecting the Rawalpindi chir forests from being burnt. Out of 1,085 acres burnt in the Rawalpindi District over 500 acres were scrub forests situated remote from the chir forests. Late and heavy snowfall in March and April caused much damage from avalanches and snowbreak in the higher hills, especially in Bashahr. In the higher chir forests in Rawalpindi the effect of this late snow was to kill off practically the whole of the needles; the trees have, however, since recovered.

Natural and artificial reproduction.

301. Practically all the principal species failed to give even an average crop of seed. Most of the deodar cones were again destroyed by insects, except in the dry regions of Kanawar. In Rawalpindi hardly any chir seed was produced. The oaks in Kangra are reported to have seeded well. Existing regeneration of deodar again suffered to a certain extent from drought in May. Owing to the continued absence of a good seed year the regeneration of this species is being retarded and there is no fresh development to report since last year. In Rawalpindi there are large numbers of chir seedlings from previous years, and with three years' practical immunity from fire the outlook is promising. In the bamboo forests there is little reproduction by seed, but the production of shoots is generally sufficient. Coppice reproduction is generally satisfactory, though, as usual, there was a certain amount of damage from frost in some parts of the irrigated plantations.

302. Owing to a favourable rainfall good progress was made with the formation of irrigated plantations. Work in Daphar plantation was confined to the preliminary operations of clearing, trenching, etc., preparatory to sowing in April 1920. In the remaining plantations 1,292 acres were sown, bringing the total area sown in those new plantations up to 4,548 acres. Sowings except in *Kalar* soil were generally successful and moderate in cost except in Kot Lakhpat. Up to the end of the year, the total expenditure incurred on and the revenue derived from these new plantations has been Rs. 1,82,000 and Rs. 1,68,000, respectively.

Exploitation.

303. The total area worked over under the different systems of management was 63,969 acres as compared with 61,150 acres last year. The most satisfactory feature in regard to the system of management employed in working forests for the production of major produce was the considerable increase in the area worked under the uniform method in Rawalpindi and Kulu. The area so dealt with should increase rapidly with the revision of existing working plans which mostly prescribe less suitable systems of management.

304. The total outturn of all classes of produce as compared with the figures of the previous three years is given below :—

——	Timber.	Firewood.	Minor produce.
	Cubic feet solid.	Cubic feet solid.	Value, Rs.
1917-18	8,260,000	27,116,000	24,02,487
Average 1914-15 to 1916-17 ...	8,106,000	28,287,000	23,57,637

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305. There was a very large increase in the departmental extraction of timber due chiefly to the commencement of departmental working in Bashahr and also to more extensive fellings in Rawalpindi and Lahore in order to meet military demands. This was, however, partly counterbalanced by a decrease in the removals by purchasers in Kangra, Simla and Rawalpindi, owing partly to arrear sales having been cleared off in 1916-17 and partly to unavoidable restriction of sales to purchasers in the interests of departmental working. The departmental extraction of firewood was limited by the transport available and in Rawalpindi and Lahore the demand by the Military Department was far in excess of the quantity the Forest Department could transport. There was also a large increase in the outturn of minor produce which was mainly due to the departmental extraction of bamboos in Kangra and to increased extraction of resin in Kangra and Rawalpindi. The Department extracted 8 lakhs of bamboos in Kangra, most of which were secured by the Military authorities to meet various war requirements.

306. In the Resin division 542,173 blazes were tapped, yielding 23,040 maunds of resin. 32,564 maunds of resin, including 10,042 maunds distilled for the United Provinces, were distilled at the Jallo factory, yielding 16,246 maunds of rosin and 46,709 gallons of turpentine. The average sale price obtained for rosin was Rs. 16-3-4 per maund and for turpentine, quality I, Rs. 3-14-7 per gallon.

Miscellaneous.

307. Relations between Revenue and Forest Officials were satisfactory, and the Department is indebted to District Officers for the assistance given in overcoming difficulties of transport which were so acute during the year under report.

308. Negotiations for leasing the European olive plantation at Khairimurat in Rawalpindi West Division having fallen through, the Department took over charge of the plantation during the year. The plantation has an area of 94 acres stocked with 15,000 olive trees. During 1917, 200 trees bore fruit and some 300 trees are bearing fruit during the current year. Fruit of the 1917 crop was pickled experimentally and oil expressed on a small scale, the results being apparently satisfactory.

309. Great difficulty has been experienced in providing browsing for the numerous camel corps which have been formed during the last three years, and the rapid deterioration of the plains forests seemed inevitable. Surra has, however, broken out in many of the corps and in order to prevent the spread of this disease it has been decided to stall-feed Government camels in future. It is also proposed to treat surra-infected camels with pyroligneous acid, a product of distillation of wood. The existing supply of this acid being quite inadequate the Forest Department proposes to erect a small plant in Kangra Division in which chir wood will be distilled. Besides pyroligneous acid the distillation process yields wood tar for which there is a strong demand in India to replace Stockholm tar.

310. During the year the Military authorities secured 3,350,000 cubic feet of timber exclusive of railway sleepers within the province as compared with 1,035,000 cubic feet in 1916-17. Military Departments were also supplied with 216 tons of rosin and 9,575 gallons of turpentine.

Financial results.

311. The financial results are given in section 43; the year's working shows a surplus of Rs. 16,65,627 and a cash surplus of Rs. 9,34,704. The prices of all classes of timber continued to be high and the market for resin products was again most favourable.

31.—Mines and Quarries.

Indian Mines Act.

312. The total number of mines worked during the year under report was 31. Of these 4 are Government salt mines, 16 coal mines (10 in Jhelum, 3 in Mianwali and 3 in Shahpur), and 11 are slate mines (3 in Gurgaon, 2 in Gurdaspur, 5 in Kangra and 1 in Hoshiarpur). A new mining lease for coal was granted over an area of 32·7 acres at Dandot (Jhelum). No new prospecting license for coal was given.

313. The total amount of minerals raised with their values as compared with 1916 is given below :—

—	Mineral, in tons.		Value, in rupees.	
	1917.	1916.	1917.	1916.
Coal	49,838	47,44[illegible]	3,76,192	3,20,026
Salt	152,360	160,356	3,88,809	4,09,244
Slate, Stone and Lime ...	8,860	7,315	1,07,913	1,07,890
Potash	181·04	...	928⅛	*Nil.*

314. Except in the case of salt there was a slight increase in the outturn compared with 1916. The figures for potash are shown for the first time. The Commissioner, Northern India Salt Revenue, is making borings of the potash deposit in the Salt Range : the deposits lie in the immediate neighbourhood of the salt mines. It is understood that prospects are not hopeful.

315. The health of the operatives was generally good with the exception of the employees of coal mines who suffered to some extent from malaria. Arrangements for sanitation were satisfactory. Wages have risen considerably on account of scarcity of labour due to recruitment.

316. Minerals which do not come under the Indian Mines Act are gold (by washing , petroleum, alum-shale, black kunkar, limestone, gypsum, antimony ore, building and sand stone. The outturn and value of these minerals during the year are as follows :— Other minerals.

District.	Name of mineral.	Outturn.	Value.
			Rs.
Ambala, Attock and Jhelum ...	Gold (by washing) ...	190·08 ounces	12,848
Attock	Petroleum	618,598 gallons	77,324
Mianwali	Do.	919 gallons	201
Do.	Alum-shale	3,287 tons	3,864
Ambala	Black kunkar	1,495 tons	2,929
Jhelum	Limestone ...	14,002 tons	10,501
Do.	Gypsum	1,068 tons	801
Do	Antimony ore	2·58 lbs.	31
Do.	Sandstone	109,432 tons	1,09,033
Simla	Building stone	9,208 tons	2,151

32.—Manufactures.

317. The total number of factories subject to the Factory Act was 191 against 184 in the previous year. The total number of operatives employed was approximately 32,000, consisting of 27,818 men, 3,211 women and 935 children. The number of factories inspected by the Inspector of Factories was 72 against 149 last year. The decrease in the inspections is due to the fact that the Factory Inspector was transferred to military duty just when the seasonal factories were starting work. Some few inspections were made after his departure by district officers.

318. Cotton-ginning factories did not work at full pressure in any district, partly because the cotton crop was not very good and partly because the number of such factories is in excess of the real needs of the Province. The water-supply has been good and sufficient Lighting and ventilation have of late been considerably improved Sanitary conditions have also on the whole been satisfactory. The fencing of dangerous parts of machinery

had continued attention—149 orders for fencing or guarding particular machines or exposed gearings were issued; they were complied with in all cases except where the machinery was standing idle. There was a small increase in the number of accidents that occurred during the year: below is given a comparative statement of accidents for the last three years:—

1915.	*1916*	*1917.*
195	190	211

319. During the year prosecutions were instituted against 10 factories and all but one were successful.

320. Women and children are still employed, to some extent, for excessive hours in factories. The weekly holiday is generally observed, but by no means always. There has been a general rise in the average rate of wages. The increase is more marked in the case of unskilled than of skilled labour; this is mainly due to the continued demand for labour for war purposes, and to the rise in the cost of living.

33.—Trade.

RAIL AND RIVER-BORNE TRADE.

General.

321. Since the commencement of the war the volume of imports has been steadily decreasing and their value steadily increasing owing to the conditions brought about by the war. The volume of imports was considerably below in the year under report and the value considerably above the pre-war period. Exports, on the other hand, do not seem to have been adversely affected by the war for, as regards both their volume and value, the year under report compares favourably with the pre-war period.

Imports.

322. No noticeable increases occurred in the volume of imports, but there were some notable increases in value, *viz.*:—

	Rs.
Twist and yarn (Indian)	58½ lakhs.
Cotton piece-goods (foreign, in bales)	146¾ „
Cotton piece-goods (Indian, in bales)	104¼ „
Bars, girders, etc.	41¾ „
Sugar (refined)	45½ „
Dried fruits and nuts	25½ „

323. There occurred an increase in cotton piece-goods (in bales) at the expense of those in boxes last year also. The imports of bars and girders, etc., and sugar, refined, which showed a considerable decrease last year, have more than recovered the lost ground in the year under report.

324. The chief decreases in the net imports are:—

Name of article.	Weight in lakhs of maunds.	Value in lakhs of rupees.
Piece-goods, foreign (in boxes)	1½	1,14
Gur, rab, etc.	6¼	39½
Sugar (unrefined)	2½	30¾
Jowar and bajra	4½	13½
Machinery and mill work	½	14½
Coal and coke (for railway purposes)	29½	6¾
Hay, straw and grass	9½	6½
Kerosine oil	2¼	10½

The outturn of gur was better than the normal both in the year under report and in the preceding year; and consequently there occurred a decrease in the import of gur, rab, etc., in both these years. The imports of

jowar and bajra also declined in both the years owing to the fact that the outturn of bajra was much above the normal in the preceding year and did not considerably fall short of it during the year under report. The ample supply of fodder in the year under report accounts for the decrease in the net import of hay, straw and grass. The decrease in the import of kerosine oil and of coal and coke imported for railway purposes was due to high prices and shortage of freight due to the war. The imports of coal and coke for private purposes also decreased in volume, though not in value.

Exports.

325. The most important increases in net exports are :—

Name of article.	Weight in lakhs of maunds.	Value in lakhs of rupees.
Gram and pulse	34	143½
Wheat	15¼	123¾
Wheat flour	11¾	63¾
Rice (husked and unhusked)	4	26
Other grains	12¾	46¾
Carriages and trucks	2½	30
Wool, raw	1¾	71
All other articles of merchandise	5¼	26½

326. The increases in the export of grains were chiefly due to the fact that there was a larger outturn in the year under report than in the preceding year. The large increase in the export of gram and pulse and of "other grains" was also partly due to the fact that, owing to deficient export in the preceding year, there was an unusually large demand for their export in the year under report. The increase in the export of carriages and trucks and of raw wool was due to increased military requirements.

327. The exports of raw cotton decreased by 5¾ lakhs of maunds in weight and Rs. 28¾ lakhs in value, owing to the fact that the crop of the year under report was much inferior to that of the preceding year. The other important decreases in exports, all of which were due to restricted demand and difficulties about freight, were under hides of cattle, raw, Rs. 44 lakhs; skins of sheep, etc., Rs. 25½ lakhs; locomotive engines, Rs. 15¼ lakhs; and silk raw (Indian), Rs. 13¾ lakhs. The trade in cattle hides had been abnormally active last year and the decline in the year under report probably marked its return to normal activity.

Treasure.

328. Owing to the high price of gold, the net import of gold bullion, which had decreased by 75¾ lakhs in the preceding year, showed a further decrease of 10¾ lakhs in the year under report. The net import of silver bullion, which had fallen by 118¼ lakhs in the preceding year, showed an advance of Rs. 78 lakhs in the year under report. The import of gold coin advanced by Rs. 120½ lakhs and that of silver coin by Rs. 7¼ lakhs.

Trans-Frontier Trade.

329. As compared with the year 1916-17 the imports increased by 3,159 maunds in weight and by Rs. 3,15,713 in value and the exports by 9,414 maunds in weight and by Rs. 22,51,451 in value.

Trade with Afghanistan.

330. There was an increase of 400 maunds in weight and of Rs. 2,092 in value under imports and of 6,928 maunds in weight and of Rs. 5,12,854 under exports Much of the increase in the value of exports was due to a general rise in prices.

Trade with Central Asia.

331. Under imports there was an increase of 642 maunds in weight and of Rs. 3,19,542 in value, chiefly under sheep and goats, Tibetan salt, charas, raw and manufactured silk and raw wool. The increase of 652 in the sheep and goats was due to a remarkable rise in the import of Tibetan salt,

for the transport of which these animals are employed as beasts of burden. The import of this salt increased by 1,686 maunds in weight but decreased by Rs. 502 in value. The fall in value is ascribed to the inferior quality of the imported salt and the increase in weight to a larger demand in the Kulu markets due to the dearness of the Indian salt. Under charas there was a decrease of 626 maunds in weight and an increase of Rs. 71,[illegible]43 in value. The decrease in weight is ascribed to the accumulation of large stocks in the Punjab in previous years, the removal of 473 maunds of charas from the Leh warehouse out of the preceding year's balance and the partial replacement of charas by silver and Russian notes as a medium of exchange for the Yarkandi trader. The increase in value is believed to be due to the willingness of traders to pay high prices for charas in the expectation that the demand for this commodity, which has been comparatively small of late, owing to a general rise in prices and the removal of troops from India, will regain in the current year some of its former briskness. The increase under raw silk was due to an increased demand for this commodity resulting from a large increase in the price of foreign cloth. Under manufactured silk there was a slight decrease in weight accompanied by an increase of Rs. 3,293 in value owing to a rise in the price. The import of raw wool decreased by 489 maunds in weight owing to a larger import of this commodity into Kashmir for pattu-manufacturing purposes and increased by Rs. 4,941 in value owing to a rise in the price.

332. There was an increase of 2,681 maunds in weight and of Rs. 17,59,578 in value under exports. The dislocation of Russian trade and the consequent absence of Russian competition account for an increase both in value and weight under cotton twist and yarn, cotton piece-goods (European and Indian), indigo, paints and colours, skins of goats and sheep, manufactured silk and refined sugar. The increase in the export of intoxicating drugs (other than opium) and of leather was due to the exhaustion of the previous stocks of these articles which had been exported in comparatively small quantities in the preceding year. The increase of Rs. 35,518 in the value of coral as compared with an increase of only 20,050 tolas in its weight was due to the fact that the coral exported during the year was of superior quality. The increase under tobacco was due to the replacement of Kashmir tobacco by Peshawar tobacco and cheap cigarettes as far as export to Central Asia is concerned. The increase of Rs. 10,073 in value and of 183 maunds in weight under Indian black tea synchronized with the fact that there was no export of green tea, of which 287 maunds were exported in 1916-17. The decrease in the value of other articles of merchandise which consist of cheap fineries, toys, etc., is due probably to the scarcity of such articles in India.

Trade with Tibet.

333. There was a decrease of Rs. 5,921 in the total value of imports and of Rs. 20,981 in the total value of exports. The weight, however, increased by 2,117 maunds in the case of the former and decreased by 1,195 maunds in the case of the latter. The principal variations under imports related to sheep and goats, borax, salt and raw wool. The increase under borax was due to a large increase in demand for this commodity owing to the war. Under salt the increase was due to a large rise in the price of Indian salt. The increase under sheep and goats was due to the fact that a larger number of these animals was required for the transport of borax and salt. The decrease under wool is believed to be due to several causes, namely, that the passes were blocked by early snow, that in parts of Western Tibet a monopoly of wool purchases has been given by the Lhasa authorities to some Hindu traders of Kumaon, who import this commodity into the United Provinces, and that the produce of wool was exceptionally good in 1916-17 and, consequently, a larger quantity of it was then available for export. Under exports the principal variations were—(*a*) an increase of Rs. 10,361 in the value of Indian and a decrease of Rs. 12,639 in the value of European cotton piece-goods due to a relatively large increase in the price of European cotton piece-goods, and (*b*) a decrease of Rs. 7,617 in the value of Indian tea, green and black, due probably to the apathy of the Kangra tea planters to the advantage of capturing the Western Tibet market where there is a continuous and heavy demand for brick-tea which is now brought there from China and Kumaon.

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Treasure.

334. The import of gold and gold coin from Central Asia decreased by Rs. 4,37,726 in value. The decrease is, however, nominal for in last year's report the value of Russian currency notes was included under this head under a misapprehension. There was actually an increase of Rs. 1,27,787 in the value of gold and gold coins imported from Central Asia. The export of gold and gold coin to this country was inconsiderable both in 1916-17 and in the year under report. The import of silver and silver coins from Central Asia increased by Rs. 4,32,726 and the export of silver and silver coins to that country by Rs. 52,358 in value. The value of Russian paper money imported from Central Asia increased by Rs. 7,95,448. The increase is attributed to the large profits made by traders on their transactions in this paper in 1916-17 owing to a great difference between the Indian and the Central Asian rate of exchange. The increase in the import and export of silver and silver coins was due to an increase in the value of trade with Central Asia and the substitution of silver coins as a medium of exchange for charas. There was an increase of Rs. 36,578 in value under export of silver coins to Chinese Tibet.

Joint Stock Companies.

335. The number of registered companies has increased by 3 to 83, the number of private ones has increased from 11 to 18 and the number of public companies has declined by 4. Seven new companies were registered and 4 went into liquidation. The whole paid-up capital of Indian-managed companies has declined by over 5 lakhs while that of European-managed concerns has increased by nearly 48 lakhs. The total for the Province is 42·5 lakhs. The Provident Funds are dying out. Indian Joint Stock enterprise continues to be on the decline chiefly as a result of incompetence, dishonesty or want of business ability.

34.—Buildings and Roads.

Total expenditure.

336. The total outlay on public works in the Buildings and Roads Branch amounted to 57·8 lakhs, or 8½ lakhs more than last year. Imperial Military Works and Land Revenue buildings each accounted for 2 lakhs of this. There was also an increased expenditure of 1¾ lakhs on road construction and improvements, 1¼ lakhs on Educational buildings, and smaller amounts under almost every other head of the Provincial Administration. Contribution Works, however, showed a falling off of over 2 lakhs and Miscellaneous and General of ¾ of a lakh.

Imperial Military Works.

337. The addition of another storey to each of the two large blocks of Army Head Quarters Offices in Simla, in order to keep pace with the growing needs of the Military Secretariat, was a work undertaken at very short notice and carried through to completion in the short space of four months. The construction of infantry lines for a depôt strength of 1,350 men at Montgomery further helped to swell the expenditure under this head.

Imperial Civil Works.

338. Apart from the special repairs to Viceregal Lodge, necessitated by the decay of the stone, which have been in hand for some years, the only Imperial Civil Work of any importance was a much-needed extension of the Rawalpindi Telegraph Office which was taken in hand towards the end of the year.

Provincial Civil Works.

339. The combined tahsil and thana at Khanewal as well as court-houses for the Sub-Divisional Officers at this place and at Moga were completed and the new sub-treasury and judicial lock-up at Bhalwal nearly finished. Good progress was also made on the new tahsil buildings at Lahore and Okara as well as on the settlement office at Dera Ghazi Khan. Towards the end of the year court-houses for the Sub-Divisional Officers were taken in hand at Leiah and Alipur and arrangements made for extending the revenue record room at Dharmsala. Two houses were also started on the area acquired for gazetted officers' residences in Lahore. The whole of this area has been laid out, roads made and trees planted, while, in the hope of improving the soil, the vacant sites have been ploughed up and put under crops. The grain elevator at Lyallpur is

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still waiting for some of its machinery from England, but even the arrival of the machinery will not permit of the elevator being brought into use, as it is dependant on the electrification of the town for its motive power. The boarding-house accommodation in the Agricultural College was further extended and a separate hostel, with additional amenities, provided for minors under the charge of the court of wards.

340. Rest-houses were completed at Nurpur (Jhelum District) and at Nankana Sahib, as well as a combined civil rest-house and dâk bungalow at Khanewal. In Simla, the policy of gradually acquiring house property, as residences for Punjab officials who have to accompany the Local Government from Lahore, was continued, by purchasing the large Brockhurst Estate. This property includes two houses and some twenty acres, with ten good building sites. It is intended to add two storeys to the larger house to provide accommodation in suites for ten married and six single officers, while other officers and a number of senior clerks will find accommodation in the other houses to be built on the estate.

Communications.

341 After much consideration, a start was made on the road which is to link up the Attock oil-fields at Khaur with the railway at Fatehjang. North of Gujrat, the Grand Trunk Road was raised well above flood level where it had been submerged and breached more than once during recent years by the Bhimber. Coming south, the improvements to the road between the new Ravi Bridge and Lahore were completed. Still further south, near Ambala, the protective works, undertaken to prevent the Tangri from spilling into the Umla, having proved successful, arrangements are now being made to bridge these torrents and thus provide a continuous bridged and metalled road all the way from Delhi to Lahore.

342. Metalling of the Kangra Valley Cart Road was finished through to Baijnath, and work was resumed on the first section of the Larji-Mandi Road. No progress could be made on the Shershah-Multan Road, owing to the inability of the North-Western Railway to find trucks to bring road metal from the quarries, a factor which has rendered road maintenance and construction a serious problem in many parts of the province where there are no local sources of supply. The problem has been rendered more acute by the concurrent increase in short distance traffic in overloaded bullock carts, which has much accentuated the surface wear and tear, at a time when metal for repairs was unobtainable.

Miscellaneous public improvements.

343 The approach to the Shalimar Garden in Lahore was improved, and the tarring of the Mall extended so as to further mitigate the dust nuisance in the capital. Some additional roads were constructed in the Lawrence Gardens, needle weirs were being built on the Chhota Ravi in order to create an artificial lake in the Minto Park and some progress was also made on the new riverside park opposite the Baradari near the site of the old road bridge.

Contribution Works.

344. The King Edward Memorial group of college and hospital buildings were practically finished and the grounds laid out. In the Aitchison College a house was built for another Assistant Principal. The church at Dharmsala, destroyed in the earthquake of 1905, was completed only to be so severely shaken in the earthquake of the 10th May 1917 that the tower is no longer safe and a considerable portion of the building will have to be dismantled.

Sanitation.

345. The extension of the Dera Ghazi Khan water-supply was practically completed as well as those at Lyallpur and Dalhousie, while experimental borings were in hand to try to find suitable water-bearing strata from which to augment the Ambala water-supply. The surface drainage scheme was sanctioned for Jullundur, but the difficulty of procuring materials necessitated the postponement of the work till happier times. Drainage schemes were, however, either in hand or completed for nine other municipalities. Eight schemes were surveyed and ten projects aggregating Rs. 11,65,801 were prepared in the Sanitary Engineer's office, while fifty-seven other projects prepared in the general branch or by Local Bodies werescrutinised.

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Consulting Architect.

346. There was no diminution in the quantity of work passing through the Consulting Architect's office. The King Edward Memorial still claimed attention and a design was prepared for a clock tower on the Anatomical Block. Other Lahore designs included a Government College hostel and the new gates for Government House while rough preliminary sketches were prepared for a new Telegraph Office. A design was worked out in consultation with the Director of Public Instruction and the Principal for a Central Training College in connection with the Lawrence Military Asylum at Sanawar where it is also proposed to erect a crêche for the orphans of British soldiers, and other buildings for which sketches were prepared. Designs were also prepared for a number of subsidiary buildings in connection with the Princess of Wales Zenana Hospital in Amritsar, an exhibition hall and pavilion at Jullundur and a number of Government buildings, while advice was given on several important building and town improvement schemes.

Electrical Engineer.

347. In addition to his own work and acting as Electrical Adviser to the Bahawalpur and Jind Durbars, the Electrical Engineer undertook the work of the North-Western Railway, thereby releasing an officer for military service. Some progress was made on the projects for the electrification of Rawalpindi, Lyallpur and Sonepat, but owing to the increased difficulty of obtaining electrical machinery and forecasting prices, no new projects of any magnitude were prepared during the year.

Establishment.

348. The Buildings and Roads Branch of the Department of Public Works has contributed very largely from its European staff for direct war work, and during the year under review two more officers have been released for military duty, while one was recalled from active service in France while on furlough. Owing to the increase in the quantity of work accomplished by a reduced staff, the establishment charges dropped from 27·3 per cent. of the previous year's provincial outlay to 20·09 per cent., while, calculated on the total works and maintenance outlay incurred by the Department during the year under review, and taking into consideration the remissions on contribution works, the establishment charges amounted to 16·3 per cent. of the works outlay.

34-A.—Railways.

349. No new lines were opened and the public booking of goods had to be restricted in order to give preference to essential military and export traffic.

35.—Irrigation.

General.

350. The direct receipts and expenditure were Rs. 2,82,36,999 and Rs. 1,44,29,762, respectively, as against Rs. 2,63,30,996 and Rs. 1,64,73,225, the average of the triennium ending 1916-17. The expenditure, as divided between capital and working expenses, was Rs. 26,13,585 and Rs. 1,18,16,177, respectively; the former included Rs. 22,08,565 expended on the triple canals.

351. The indirect revenue credited to the canals on account of enhanced land revenue, etc., amounted to Rs. 1,17,65,897 as against Rs. 1,19,54,952, the average of the previous triennium.

352. The total area irrigated by works of all kinds under the control of the Irrigation Department amounted to 9,063,901 acres, showing a decrease of 515,923 acres and 156,796 acres as compared with the previous year and the previous triennial period.

353. The capital outlay (direct and indirect) incurred on the canals classed as Productive Major Works amounted to Rs. 26,88,971, bringing up the total capital cost of these works to about Rs. 2,388 lakhs including Rs. 155 lakhs contributed by the Native States. The net revenue earned by Imperial Canals was Rs. 2,66,99,422, giving a profit of Rs. 11·95 per cent. on the capital invested to date (Rs. 22,33,05,164).

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354. The area irrigated by and the financial results of the operations of canals classified as Productive Major Works is shown in the following statement :—

1	2	3	4	5	6	7	
						Percentage profit on the capital outlay	
Serial No.	Name of Canal.	Area Irrigated.	Gross income.	Working expenses.	Net income.	Excluding interest charges.	Including interest charges.
		Acres.	Rs.	Rs.	Rs.	Rs.	Rs.
1	Western Jumna ..	725,325	(a) 33,13,833	(a) 13,70,721	(a) 19,43,112	(a) 10·98	(a) 7·67
2	Sirhind	931,894	(b) 34,35,019	(b) 12,54,492	(b) 21,80,527	(b) 8·51	(b) 5·20
3	Upper Bari Doab ...	1,144,521	49,42,130	13,34,133	36,07,997	16·52	13·17
4	Lower Bari Doab ...	621,600	16,43,347	9,13,857	7,29,490	3·24	-0·11
5	Upper Chenab	382,935	23,45,069	10,86,613	12,58,456	3·52	0·16
6	Lower Chenab ..	2,277,125	1,52,63,175	24,60,511	1,28,02,664	39·37	35·99
7	Upper Jhelum ...	177,006	5,37,993	8,27,495	-2,89,502	-0·64	-4·00
8	Lower Jhelum ...	765,470	44,29,159	9,15,765	35,13,394	21·65	18·29
9	Upper Sutlej Inundation Canals.	437,857	7,50,234	3,82,314	3,67,920	20·24	16·96
10	Sidhnai ...	318,442	7,01,625	1,58,769	5,42,856	40·75	37·38
11	Indus Inundation Canals	204,213	4,41,690	3,99,182	42,508	1·42	-1·95
	Total ...	7,986,388	3,78,03,274	1,11,03,852	2,66,99,422	11·95	8·60

(a) Excludes Patiala State.

(b) Excludes Native States, Patiala, Nabha and Jind.

355. On all the Imperial Minor Works not classed as Productive, including the two canals for which capital account is kept, the net profit amounted to Rs. 12,36,137 as against Rs. 11,36,719 in the previous year.

356. There is only one Provincial Canal in operation, *viz.*, the Shahpur Provincial Canal. The Ravi Inundation Canals now cease to exist. The net profit was Rs. 17,179.

357. The details of the working of each canal are given below :—

MAJOR WORKS—CANALS IN OPERATION.

Western Jumna Canal.

358. The Canal was in flow for 303 days (148 days in *kharif* and 155 days in *rabi*) ; it was closed for 62 days (35 days in *kharif* and 27 days in *rabi*). The monsoon was abnormally active commencing early in June and gave good rain until the end of September. During *rabi* there was very heavy rain at the end of October, but the rest of the season was almost rainless. The total area irrigated, including the area irrigated in the Patiala and Jind States, was 725,325 acres (373,102 acres in *kharif* and 352,223 acres in *rabi*) as against 843,127 acres the average of the previous triennium. The decrease in the area irrigated was due to the heavy rainfall during both crops and to recent years having given exceptionally high results.

359. The gross receipts were Rs. 33,13,833 and the working expenses Rs. 13,70,721, giving a net revenue of Rs. 19,43,112 against Rs. 17,47,744, the average of the previous triennium, and Rs. 17,95,729 of the previous year. The increase was due to an increase in the area irrigated during *rabi* 1916-17 the revenue on which was collected during the year. The result would have been still better if the cotton crop had not been damaged by excessive rainfall in the *kharif* of 1917.

PRODUCTION AND DISTRIBUTION.

360. The net revenue received by the Patiala State on their channels on the Sirsa Branch amounted to Rs. 2,20,460 or 19 per cent. on the capital invested against an average of Rs. 1,34,293 or 11·57 per cent. for the triennium ending 1916-17 and Rs. 1,20,147 or 10·35 per cent. of the previous year. The area assessed was 74,878 acres (40,696 acres in *kharif* and 34,182 acres in *rabi*) as against 71,036 acres the average of the previous triennium.

361. The working of the Jind State Distributaries showed a profit of Rs. 1,36,391 against Rs. 1,00,187 in the previous year. The irrigation was 59,696 acres as against 62,363 acres, the average of the three previous years.

Sirhind Canal.

362. The canal remained in flow for 223 days (105 in *kharif* and 118 in *rabi*). In *kharif* the rainfall was exceptionally heavy, approximately double the normal. In *rabi* also the rainfall was in excess of normal, but most of it fell in October and the rest in March. From November to February the weather was exceptionally dry and the river supply insufficient to meet the keen demand.

363. The area irrigated on British and Native States Branches was 931,894 acres. It was the lowest since 1910-11 when it was 843,476 acres, the maximum being 1,609,458 acres irrigated in 1911-12. The decrease is due to heavy rains.

364. The net revenue earned by the British Branches amounted to Rs. 21,80,527 or 8·51 per cent. on the capital invested. The corresponding figures for the previous year were Rs. 29,76,526, or 11·63 per cent. The decrease was due to the shortage in the areas on which collections were made, being 753,083 acres as against 936,182 acres in the previous year. The working expenses of Rs. 12,54,491, though less by Rs. 1,32,658 than that in the previous year, works out the rate of Rs. 2·27 per acre irrigated, which is the highest on record, the previous highest being Rs. 2·24 in 1893-94 when the canal was closed for 3 months early in the *kharif* season owing to silt troubles in the main line. This figure is hardly likely to recur as the area irrigated was phenomenally low and at the same time heavy maintenance charges on torrent works were incurred.

365. On the Native States Branches the net revenue was Rs. 22,61,944, or 9·20 per cent., on the capital invested, as against Rs. 25,72,310, or 11·38 per cent., in the previous year.

Upper Bari Doab Canal.

366. As compared with 1916-17 the area irrigated (1,144,521 acres) showed a decrease of 56,776 acres due to the abnormal monsoon rainfall, the heaviest experienced since 1908, and to plentiful rainfall in September and October, which allowed large areas to be sown and matured in the *rabi* without canal water; it is to some extent also due to land flooded by rain in October not having dried in time to permit of *rabi* sowings. The net income amounted to Rs. 36,07,997 equivalent to 16·52 per cent. on the capital invested against 17·35 per cent. of the previous year.

367. The occupier's rates remitted amounted to Rs. 3,04,973 against Rs. 97,292 in 1916-17. Heavy remissions resulted from great damage to the cotton crop caused by abnormal rainfall for which special remissions had to be granted. Liberal remissions were also necessitated in *rabi* 1916-17 on account of the abnormally dry season.

368. The canal was closed from 17th April 1917 to 2nd May 1917 when all falls were unwatered and repaired where necessary. The year under report was unfavourable for agricultural operations on this canal.

Lower Bari Doab Canal.

369. The canal was in flow for 323 days against 343 days in the previous year. The demand for canal water was slack in the *kharif* season, especially during August and September when heavy rain fell, but very keen in the *rabi* season owing to scanty rainfall. In the winter the supply in the Ravi was sufficient to give the Sidhnai Canal its indent and to supplement the shortage which occasionally occurred in supply received from the Upper Chenab Canal.

370. The area irrigated was 621,600 acres as against 871,308 acres anticipated in the project forecast. In 1916-17 the irrigation was 514,936 acres against 650,000 of the project. The progress of irrigation is a year

behind that of its project estimate, owing chiefly to the canal having started irrigation a year later than had been anticipated and to the backwardness of colonization.

371. The gross receipts amounted to Rs. 16,43,347, the working expenses to Rs. 9,13,857 and the net revenue to Rs. 7,29,490. The receipts are 6·8 lakhs more than last year though greatly reduced on account of remissions and backwardness of colonization.

372. The great increase in the working expenses is due to the closure of the project estimate. Expenditure under capital has decreased, that under working expenses increased and a greater proportion of establishment charges is now debited to the latter head.

373. Proprietary areas possess good soil and are being fully irrigated and cultivated. The area of Crown Waste land allotted at the end of the year was 817,662 acres out of the 1,016,972 acres of the culturable area commanded. Great assistance to the working of channels was afforded by the large increase in temporary allotments, but more needs to be done in this direction.

Upper Chenab Canal.

374. The area irrigated during this and in the previous year was 382,935 acres and 437,477 acres, respectively, as against the project forecast of 648,367 acres. The falling-off during the year was chiefly due to the abundant rainfall. The heavy rain in September and October reduced the demand for canal water to mature the *kharif* crops and enabled a large area of *rabi* crops, especially gram, to be sown and matured without canal water. The steps taken strictly to exclude all well lands from canal irrigation also adversely affected the irrigated area.

375. As compared with the project forecast the development of irrigation has not been as rapid as was anticipated, mainly due to a shortage in *rabi* irrigation. Up to 1915-16 the *rabi* irrigation on this canal represented only the area to which first and last waterings were given owing to the unforeseen delay in the completion of the Upper Jhelum Canal. The Upper Jhelum Canal was opened in December 1915, but was unable to carry the full supply intended in 1916-17, and this, combined with the failure of winter rains and the consequent low supply in the river, resulted in a further drop in the *rabi* irrigation in that year. The year under report was also not favourable for canal irrigation on this canal.

376. The net revenue amounted to Rs. 12,58,456, or 3·52 per cent. on the capital outlay. This canal is, to a large extent, a feeder channel for the Lower Bari Doab Canal and one-third of the irrigated area is irrigated during *kharif* only and its commanded area is intersected by numerous hill streams, which, when in flood, compete with the canal as a means of irrigation, thereby impairing the financial result of the project.

Lower Chenab Canal.

377. The canal ran for 137 days in the *kharif* and 162 days in the *rabi*, the period of closure being 48 days in the former and 20 days in the latter.

378. The *kharif* season was excessively wet and demand was seldom keen. The late rains in September and October gave a great impetus to *rabi* sowings, and as the rainfall in the *rabi* months was in defect the demand was strong throughout. It was, however, sufficiently met.

379. The area irrigated was 2,277,120 acres, being less by 17,215 acres as compared with the triennial period ending 1916-17, but more by 3,828 acres than the three years ending 1913-14.

380. The net revenue amounted to Rs. 1,28,02,664, or 39·37 per cent. on the capital outlay, as against Rs. 1,41,10,320, or 43·61 per cent. in the previous year.

381. The decrease was due to—

(*a*) deduction of Rs. 8,34,000 for cost of Civil Administration of the Lyallpur District for the 3½ years previous to the year under report. This omission by the Civil Department enhanced the percentage of the previous years and reduced that of this year.

(*b*) the decrease in the area irrigated during *rabi* 1916-17 owing to deficient rainfall and consequent low river.

PRODUCTION AND DISTRIBUTION.

382. The accumulated net profits have increased from Rs. 12,71,39,042 to Rs. 13,88,42,183 against a capital of Rs. 3,25,18,571 invested at the end of the year.

Upper Jhelum Canal.

383. This was the 2nd year of irrigation on this canal. The area irrigated was 177,006 acres against 117,605 acres in the preceding year and was short of the project forecast by 102,994 acres, chiefly owing to irrigation having started a year later than anticipated.

384. The gross income from all sources amounted to Rs 5,37,993 and the working expenses to Rs. 8,27,495, resulting in a loss of Rs. 2,89,502, or 0·64 per cent. on the capital outlay. It may be noted here that the expenditure incurred on this canal is largely in the interests of the Upper Chenab and Lower Bari Doab Canals.

385. The main features of interest of the year have been the steady rising of the supply in the main line, and the growing up of, and the carrying through of, the programme of distributing the winter waters of the Jhelum, Chenab and Ravi rivers between the 5 connected canals (the Upper Jhelum, Lower Jhelum, Upper Chenab, Lower Chenab and Lower Bari Doab Canals).

Lower Jhelum Canal.

386. The area irrigated was 231,872 acres in *kharif* and 533,598 acres in *rabi*, as compared with 232,414 acres and 587,728 acres in the corresponding crops of 1916-17. The decrease in the area irrigated during *rabi* was partly due to the fact that by reason of excessive rainfall a large area was sown as *barani* and ultimately matured without getting canal water and partly to the shortage of labour. Out of the total area of 765,470 acres irrigated 379,739 acres were in proprietary villages and 385,731 acres in Colony villages.

387. The gross receipts and the working expenses were Rs. 44,29,159 and Rs. 9,15,765, respectively, giving a net revenue of Rs. 35,13,394 or 21·65 on the capital outlay at the end of the year. This was 2 per cent. less than that of the preceding year due to—

(*a*) an increase of Rs. 2,92,000 in the capital outlay;

(*b*) the decrease in the area irrigated in *kharif* 1917 and *rabi* 1916-17; the former was due to excessive rainfall, while the latter was attributed in the previous year's report to drought and very low river supplies

Upper Sutlej Inundation Canals.

388. The net area assessed (*viz.*, 431,028 acres) exceeded by 157,379 and 99,967 acres as compared with the averages of the two triennia ending 1913-14 and 1916-17, respectively.

389. The gross income amounted to Rs. 7,50,234 and working expenses to Rs. 3,82,314, giving a net revenue of Rs. 3,67,920 or 20·24 per cent. on the capital invested. The figures of gross income and net revenue are higher than any during the last 16 years owing to good supply in the river.

Sidhnai Canal.

390. The irrigation effected was 131,207 acres in *kharif* and 187,235 acres in *rabi* as compared with 114,933 and 183,623 acres, respectively, in the corresponding crops of the preceding year. The percentage of the failed crops was 19·97 in *kharif* and 8·29 in *rabi* against 13 95 and 17·7, respectively, in the previous year. The high percentage of remissions in *kharif* was due to rain and floods which were abnormal.

391. The total areas irrigated and assessed were the highest yet recorded on this system, but taking each crop separately the area irrigated was the second largest in both crops whereas that assessed was the highest on record in *rabi* and second highest in *kharif*.

392. The total income from all sources amounted to Rs. 7,01,625 and the working expenses to Rs. 1,58,769, giving a net revenue of Rs. 5,42,856, or 40·75 per cent. on the capital outlay, against Rs. 4,30,737, or 32·25 per cent. in the preceding year.

Indus Inundation Canals.

393. The area irrigated was 140,042 acres in *kharif* and 64,171 acres in *rabi* as compared with 179,941 and 85,217 acres, respectively, in the preceding year. The decrease both in *kharif* and *rabi* is attributable

to the unprecedented severity of the hill torrent floods of August and September consequent on the excessive rainfall in the Suleman Hills.

394. The total income from all sources and the working expenses amounted to Rs. 4,41,690 and Rs. 3,99,182, respectively, giving a net profit of Rs. 42,508 against Rs. 1,29,705 in the preceding year.

MINOR IRRIGATION WORKS.

Shahpur Imperial Canals.

395. The canals were opened early in May and closed early in September. The canals worked satisfactorily during the *kharif* season. There were hailstorms during the harvest and some damage was done to crops. The area irrigated was 42,633 acres as against 39,075 acres, the average of the previous triennium. Revenue was remitted on 3,115 acres, of which 189 acres were by reason of flooding and 2,926 acres by reason of bad germination.

396. The net revenue of Rs. 75,086 brought a return of 34·77 per cent. on Rs. 2,15,914, the capital outlay up to date.

Ghaggar Canals.

397. The operations of the year resulted in a loss of Rs. 12,165 which is equivalent to 3·23 per cent. on the capital outlay as compared with a loss of Rs. 8,630 or 2·29 per cent. in the previous year. The financial position of these canals is now under consideration.

Lower Sutlej Inundation Canals.

398. The gross area irrigated (365,184 acres) is the second highest on record. The matured area (302,029 acres) is greater than any of the preceding years, except 1916-17 and 1914-15, when it amounted to 320,613 and 347,483 acres, respectively. The failed area was 63,155 acres against 43,271 acres during the preceding year. The increase is almost wholly attributable to excessive rainfall.

399. The net revenue was Rs. 4,16,395 against Rs. 3,87,001 in 1916-17 and an average of Rs. 3,59,892 in the previous triennium.

Chenab Inundation Canals.

400. The river Chenab rose gradually during the month of June and a flood occurred on the 21st. The river fell again towards the end of the month, but rose in July, and the supply was well maintained until the close of the irrigating season.

401. Both the irrigated and assessed areas (229,042 acres and 197,849 acres, respectively) were the highest on record. The net income was Rs. 3,92,373 as against Rs. 2,88,033 in the previous year and an average of Rs. 2,95,174 in the previous triennium. Thus the results of the year's working were very satisfactory.

Muzaffargarh Inundation Canals.

402. The year was an unfortunate one as regards weather, but results are better than might have been expected considering the adverse conditions which prevailed. The area irrigated, *viz.*, 385,075 acres, was the third largest on record.

403. The area matured (330,009 acres) was smaller than the average (349,253 acres) of the previous triennium, due to the high percentage of failed area attributable to flooding and rise of sub-soil water caused by heavy rain in August and September.

404. The net revenue amounted to Rs. 3,64,448 against Rs. 4,02,472 in the preceding year and an average of Rs. 3,13,213 in the previous triennium.

Shahpur Provincial Canals.

405. The area successfully matured and assessed was 23,645 acres as compared with 25,677 acres of the preceding triennium. The decrease was due to heavy rains during August and September 1917 which enabled the zamindars to dispense with canal water for the *rabi* to a large extent.

406. The revenue was remitted on 524 acres due to bad germination and besides this 916 acres were remitted under tenancy rules.

407. The working operations showed a net profit of Rs. 20,826 due to a large increase of 16,366 acres in the figures of area, assessment on which was collected during the year, as compared with the average of the triennium ending 1916-17.

CHAPTER V.

REVENUE AND FINANCE.

Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

Land Revenue.—Report on the Land Revenue Administration of the Punjab for the agricultural year ending 30th September 1917.

Canal Revenue.—Administration Report of the Irrigation Department, Punjab, for the year 1917-18.

Excise and Opium.—Report on the Excise Administration of the Punjab for the year 1917-18.

Stamps.—Report on the Administration of the Stamp Department of the Punjab for the triennium ending 31st March 1918.

Income-tax.—Report on the Income-tax Administration of the Punjab for 1917-18.

Forests.—Progress Report of Forest Administration in the Punjab for 1917-18.

Provincial Revenues.—Audit and Appropriation Report on the Accounts of the Punjab for 1917-18 and Review of the Annual Accounts of the Punjab for the year 1917-18, published in the *Punjab Gazette*, dated 15th November 1918, Supplement, Part II.

Local Funds.—Report on the Administration and Accounts of the District Boards in the Punjab for the year 1917-18.

Municipal Revenues.—Report on the working of Municipalities in the Punjab during the year 1917-18.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Statistical Abstract for British India, Volume I—Commercial Statistics.
Volume II—Financial Statistics.
Volume IV—Administrative and Judicial (including area, population and local funds).

Salt.—Report on the Administration of the Northern India Salt Revenue Department for the official year 1917-18.

36.—Gross Revenue and Expenditure.

408. The following table shows the receipts under the various heads of revenue excluding revenue from Salt in the year under report :—

(In thousands of rupees.)

Major heads	Imperial.	Provincial.	Total.	+ more — less on figures for 1916-17.
Land Revenue	1,55,91	1,55,91	3,11,82	+ 26,62
Opium	7,42	...	7,42	— 4
Stamps	30,00	30,00	60,00	+ 18
Excise	42,81	42,82	85,63	+ 9,76
Provincial Rates	...	21	21	— 11
Customs	22	...	22	— 1
Income-tax	18,85	17,18	36,03	+ 11,41
Forests	...	21,18	21,18	+ 4,30
Registration	...	3,81	3,81	+ 9
Tributes	1,44	...	1,44	— 2
Interest	2,52	2,47	4,99	— 32
Law and Justice—Courts of Law	...	6,81	6,81	— 9
" " " — Jails	...	6,77	6,77	+ 2,61
Police	...	2,27	2,27	— 44
Education	...	5,25	5,25	+ 3
Medical	...	45	45	+ 5
Sanitation	...	1,27	1,27	+ 11
Agriculture	...	3,32	3,32	+ 82
Scientific and Miscellaneous	...	29	29	— 2
Receipts in aid of Superannuation ...	1,23	86	2,09	— 9
Stationery and Printing	67	1 00	1,67	— 29
Miscellaneous	3,68	7,08	10,76	— 2,30
Irrigation—Major Works	1,89,11	1,89,12	3,78,23	— 18,24
" Minor Works	10,02	1,26	11,28	+ 1,05
Civil Works	89	3,76	4,65	— 43
Transfers between Imperial and Provincial...	- 47,21	47,21		...
Total ...	4,17,56	5,50,30	9,67,86	+ 34,64

REVENUE AND FINANCE.

409. The gross expenditure excluding expenditure of the Salt, Military, Railway, Post Office and Telegraph Departments and capital expenditure on Canals was as follows :—

(In thousands of rupees.)

Major heads.	Imperial.	Provincial.	Total.	+ more — less on figures for 1916-17.
Refunds	1,20	1,24	2,44	+ 39
Assignments	59	34	93	— 7
Land Revenue	...	46,59	46,59	— 70
Stamps...	93	93	1,86	+ 9
Excise	1,18	1,18	2,35	+ 3
Income-Tax	17	16	33	+ 6
Forests	...	11,58	11,58	+ 2,23
Registration	...	1,27	1,27	+ 2
Interest	1,86	1,93	3,79	+ 20
General Administration	4,42	12,40	16,82	— 5
Law and Justice—Courts of Law ...	...	44,48	44,48	— 47
" " " —Jails	...	19,44	19,44	+ 1,83
Police	...	66,22	66,22	+ 1,70
Education	...	44,47	44,47	+ 1,68
Ecclesiastical	2,62	...	2,62	+ 17
Medical	...	9,26	9,26	+ 1,23
Sanitation	...	9,81	9,81	+ 1,73
Political	5,92	...	5,92	— 23
Agriculture	...	13,63	13,63	+ 1,22
Scientific and Miscellaneous	...	1,40	1,40	— 8
Pensions, Territorial and Political ...	69	...	69	— 2
Superannuation, &c.	10	25,78	25,88	+ 1,61
Stationery and Printing	20	7,10	7,30	+ 10
Miscellaneous	59	15,20	15,79	+ 10,00
Famine Relief	— 4	— 1	— 5	— 12,56
Irrigation—Major Works	89,53	89,53	1,79,06	+ 5,56
" Minor Works	8,24	3,33	11,57	+ 86
Civil Works	5,97	51,27	57,24	+ 4,91
Total ...	1,24,17	4,78,53	6,02,70	+ 20,04

37.—Land Revenue.

410. The Land Revenue Report gives the figures for land revenue according to the Agricultural year ending 30th September, whereas the financial year ends on 31st March. There must consequently always be a difference between the total collections as calculated by the Treasury and the yearly returns furnished by the Financial Commissioners' Office.

411. The Land Revenue Report for the year ending 30th September 1917 shows the following figures for collections including those on

account of previous years, comments on which have already been made in Section 10 dealing with demands :—

		Rs.
Fixed Land Revenue	... ...	2,40,74,033
Fluctuating Land Revenue	... ...	1,38,32,239
Temporarily excluded from fixed Land Revenue Roll	...	74,226
Other Land Revenue	... ...	40,32,927
Total	...	4,20,13,425

38.—Irrigation.

412. The total capital invested up to the end of 1917-18 on canals in operation classed as Productive Major Works was Rs. 22,33,05,164. Capital expenditure during the year amounted to Rs. 26,88,971. The income from all sources excluding refunds was Rs. 3,78,03,274. Working expenses totalled Rs. 1,11,03,852. Interest charges amounted to Rs. 74,84,392. The net profit left was Rs. 1,92,15,030 as against Rs. 2,16,57,594 in the previous year.

413. The balance profit on Imperial Canals, Minor Works not classed as Productive, was Rs. 12,36,137 as against Rs. 11,36,719 in 1916-17. Provincial Canals show a profit of Rs. 17,179 as against a deficit of Rs. 1,326 in the preceding year.

39.—Excise and Opium.

414. Notwithstanding interruption of railway goods traffic, affecting their supplies of distilling bases and coal, the 5 Punjab distilleries worked at high pressure, substituting for the Java solidified molasses, country *gur* and molasses and for coal, firewood. The issues of spirit of all classes amounted to 598,481 gallons, an increase of 123,648 gallons or 26 per cent. on the figures for 1916-17. The most noticeable increase was in spiced spirit and denatured spirit. The Amritsar Distillery secured the contract to supply the Sind Province for one year commencing November 1917, with two lakhs proof gallons of country spirit. On the other hand imports into the Punjab from the Rosa Distillery in the United Provinces fell to one-third of the previous year's figures.

415. The year under report was the last of the three for which the system of distillery vend spheres was instituted. When this system was introduced the still power of the provincial distilleries exceeded the provincial demand. It was intended to prevent at first cut-throat competition between distillers and later a combination between them adverse to Government. War conditions have now made it difficult for distillers to meet the calls made on them, while the Sind contract secured by the Amritsar distillery has absorbed a considerable part of the outturn : consequently the system has been discontinued.

416. Consumption of country spirit in 1917-18 amounted to 398,042 gallons, an increase on 1916-17 of 11·2 per cent. The chief reasons are the prosperity of the agricultural classes, the receipt of large remittances from men on military service, increased spending power of labouring and menial classes due to good employment and high wages, increase in number of weddings, decrease in illicit distillation and illegal imports from Native States, and a considerable rise in the prices of imported liquors which stimulated the use of country spirit. Yet, notwithstanding increased consumption, the increase in convictions for drunkenness was very slight.

417. Breweries have again had a prosperous year and have worked up to their utmost capacity. Issues of beer amounted to 2,783,222 gallons as against 2,272,192 in 1916-17, and the duty realised was Rs. 7,44,741 against Rs. 4,79,269. The apparently disproportionate increase in the duty realised is explained by the fact that an unusually large sum for the last quarter of the year 1916-17 was credited in the accounts for 1917-18. The consumption of imported beer fell

REVENUE AND FINANCE.

from 68,276 gallons to 60,054 gallons; while that of Indian-made beer rose from 1,191,515 to 1,571,597 gallons mainly due to the number of troops stationed in the Punjab. While beer is not, among the general population of the Punjab, replacing country spirit, it is said to be drunk by the poorer classes who cannot afford country spirit or owing to its cheapness and cooling effects are taking to it as an extra to country spirit.

418. The consumption of excise opium decreased from 51,007 seers to 50,445 seers, but that of other opium slightly increased, *viz.*, from 10,147 to 10,315 seers. The total receipts from opium amounted to Rs. 18,32,425, an increase of Rs. 1,77,509 or 10·7 per cent. During the year the issue price of excise opium was raised from Rs. 25 to Rs. 27-8-0, resulting in a net gain of Rs. 1,18,419; while license fees increased by Rs. 73,985 notwithstanding that action had been taken to restrict issues of excise opium. The rise in license fees furnishes an indication of increased illicit transactions. Further action to check them and control the trade in opium is under consideration

419. The issues of charas from Punjab warehouses declined from 3,246 maunds in 1916-17 to 3,034 maunds in 1917-18. The duty was, however, enhanced on 1st April 1916 from Rs. 12 to Rs. 14 per seer and realised Rs. 60,19,146, an increase of Rs. 58,609 on the previous year.

420. The consumption of bhang rose from 93,339 seers in 1916-17 to 95,414 seers in the year under report. Variations in sales are attributed to the influx or absence of classes accustomed to its use, such as *faqirs* and the followers of troops: the rise in the price of other intoxicants also contributed to an increased consumption of bhang by the poorer classes. There was a decline of Rs. 2,707 in the receipts on account of duty owing to a fall in the duty-paid bhang exported from the province. The number of retail hemp drug licenses was further reduced by 13.

421. The sale of cocaine to the public declined from 8,862 grains to 7,613 grains. Owing to the war and the consequent restricted imports there has been a considerable rise in the price of cocaine. At the same time there is now less illicit traffic in the drug.

40.—Salt Revenue.

422. [Owing to the Report on the Administration of the Northern India Salt Revenue Department for 1917-18 having been delayed, no remarks can be made on this subject.]

41.—Stamp Revenue.

423. Receipts under the Stamp and Court Fees Acts contributed Rs. 60,06,794 to the State revenues, a sum exceeding the income of the previous year by Rs 19,660. Of the total receipts of the year Rs. 38,31,589 were derived from the sale of judicial or court-fee stamps. The receipts from this source show a decline of Rs. 12,524 as compared with those of the previous year. The sale of non-judicial stamps contributed Rs. 20,89,891 towards the total revenue of the year, an increase of Rs. 33,747. The greater portion of the income is derived from the sale of non-judicial impressed sheets, the receipts from which rose from Rs. 15,90,048 to Rs. 16,38,705. Increases in the sale of impressed sheets occurred in 18 districts of the Province; the remaining 10 showing decreases which ranged from Rs. 172 to Rs. 4,844, the net result being an increase of Rs. 48,657. The increases are generally attributable to the execution of a larger number of conveyances and bonds.

424. The expenditure of the Department rose from Rs. 2,30,033 in 1916-17 to Rs. 2,36,859 in the year under report.

42.—Income-tax.

General.

425. High prices of agricultural and industrial products, a lucrative market for imported goods and improved methods of assessment in a number of districts affected the collections of the year which amounted to Rs. 32,37,375, or 34 per cent. more than in the last year of the preceding triennium.

Tax on salaries.

426. In the case of salary paid by companies the collections under section 9 (1) increased by 51 per cent., the districts of Lahore and Simla being responsible for the increase. Arrangements for collections under section 9 (2) worked satisfactorily, but there was no noticeable increase in the tax collected under this section.

Profits of companies.

427 The profits of companies yielded a tax amounting to Rs. 4,38,215, a satisfactory increase on the previous year's total of Rs. 1,40,666. Lahore, which collected the tax not only from local companies but also from the Dhariwal Mills, accounts for over 80 per cent. of the collections. Two companies in Simla and one in Rawalpindi paid each about Rs. 15,0?0 as tax. In the rest of the province the collections amounted to only 5 per cent of the total.

Interest on securities.

428. The amount realized under the head of interest on securities increased by nearly 50 per cent. and the tax realized on the securities issued by companies was nearly doubled.

Other sources.

429. Under Part IV collections amounting to Rs. 21,84,701 were made from 35,917 assessees. On the previous year's figures this amounts to an increase of 28 per cent. in collections and of 16 per cent. in the number of assessees.

430. Uncollected balances amount to the considerable sum of Rs. 4,30,262 including Rs. 3,18,252 assessed under Part IV in 1917-18. The large outstandings in Amritsar, Lahore, Simla and Ambala were the result of delay in assessment and decision of objections due to the employment of the special assessing agency which had to take up several districts in succession.

Special assessment staff.

431. The special assessment staff of four naib-tahsildars, two munims, two clerks and six peons, employed in 1917-18, under the supervision of an Extra Assistant Commissioner, assessed the towns of Lahore, Amritsar, Dalhousie, Jullundur City and Cantonment, Hoshiarpur, Ambala City and Cantonment, Karnal, Simla and Kasauli, and secured an increase of the final demand from Rs. 6,25,521 to Rs. 10,08,170, while its total cost was only Rs. 20,081.

43.—Forest Revenue.

432. The revenue of the Forest year ending June 30th, 1918, was Rs. 21·77 lakhs and the expenditure Rs. 12·42 lakhs, yielding a cash surplus of Rs. 9·35 lakhs. The revenue and expenditure were classified as follows:—

Revenue.		*Expenditure.*	
I.—Timber and other produce removed from the forests by Government Agency ...	9·66 lakhs.	A.—Extension, constitution, improvement and exploitation of the forest property ...	7·52 lakhs.
II.—Timber and other produce removed from the forests by consumers or purchasers ...	8·65 "	B.—Administrative, executive and protective charges	4·90 "
III.—Drift and waif wood and confiscated forest produce ...	0·35 lakhs.		12·42 "
IV.—Revenue from forests not managed by Government ...	0·01 lakhs.	Cash surplus	9·35 "
V.—Miscellaneous ...	3·10 "		
	21·77 "		21·77 "

433. The revenue rose to Rs. 4·84 lakhs and the expenditure Rs. 2·75 lakhs. The increase in revenue was chiefly due to an increased outturn of and higher prices obtained for nearly all kinds of produce. The increase in expenditure was mainly due to departmental working in Bashahr, Rawalpindi and Kangra, as well as to the expansion of the resin industry.

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434. The true results of the year's working show a surplus of Rs. 16·66 lakhs, *viz.*—

	Lakhs. Rs.
Cash surplus	9·35
Increase in value of stock	4·65
Increase in outstandings of revenue	0·05
Increase in outstandings against contractors and disbursers	1·47
Capital expenditure less interest	1·14
	16·66

44.—Provincial Revenue and Expenditure.

435. The Provincial shares of the Revenue raised and expenditure incurred in the Punjab during the last two years, with the opening and closing balances in each year, are shown in the table below :—

(In thousands of rupees.)

—	Actuals, 1916-17.	Actuals, 1917-18.	Difference between actuals, 1916-17 and 1917-18.
Opening balance	63,55	1,22,75	+ 59,20
Revenue	5,17,89	5,50,30	+ 32,41
Expenditure	4,58,69	4,78,53	− 19,84
Closing balance...	1,22,75	1,94,52	+ 71,77

436. The accounts of 1917-18 show an almost uniform improvement on those of 1916-17 throughout all the heads of revenue. The important variations are given below :—

(In thousands of rupees.)	(+ more ; − less.)
I—Land Revenue	+ 13,31
V—Excise	+ 4,89
VIII—Income-tax	+ 4,87
IX—Forest	+ 4,30
XV-B—Law and Justice (Jails)	+ 2,61
XXI-A—Agriculture	+ 82
XXV—Miscellaneous	+ 1,58
XXIX—Irrigation Major Works—	
Direct	− 2,93
Indirect	− 6,19
XXX—Irrigation Minor Works	+ 63
Transfers	+ 9,73

437. The increase under Land Revenue is due to the recovery of suspended revenue of past years, and to a reduction in the ordinary programme of suspensions ; favourable harvest prospects and high prices enabled the zamindar to pay arrears and to meet the full demand—a demand which is gradually growing because of progressive enhancements and the extension of irrigation. The Excise receipts reflect the general prosperity of the province ; the consumption of malt liquors has risen in consequence of the large numbers of troops stationed in the province ; and this, coupled with the increased duty and reduction of imports from overseas, accounts for an increase of Rs. 8,66,000 under the sub-head. The normal growth of income-tax has been stimulated by the efforts of the special assessing agency which is systematically rounding up defaulters and exacting a proper contribution from those who so far have been evading their full share of the burden. The high prices of, and the heavy demand for wood and other forest products, the speeding up of felling programmes and the extension of leases for temporary cultivation are the main reasons for the growth of revenue under the Forest head. The increase under "Jails" is composed largely of arrear payments for blankets supplied in 1916-17 but not paid for till 1917-18. The betterment of income under "XXI-A—Agriculture" is partly nominal, representing as it does certain book transactions in connection with the purchase and sale of seed. The repayment of

one lakh advanced to the Imperial Relief Fund in connection with the opening of cheap grain shops by municipalities, and the income resulting from the introduction of the new copying agency scheme explain the difference under "XXV—Miscellaneous." Owing to the heavy monsoon of 1917 the spring harvest of 1917-18 was to some extent independent of canal irrigation; while in certain irrigated areas water logging-hampered cultivation. Thus the direct receipts under "XXIX—Irrigation Major Works" show a slight decrease. Similar reasons are probably responsible for the deficiency in the indirect receipts. Under Irrigation Minor Works the extension of irrigation from the Kitchin-Irving and other smaller canals explains the growth in income. The large increase under transfers is more than covered by the special wheat profits grant of 11·7 lakhs.

438. Under expenditure heads the position is shown by the following figures:—

(In thousands of rupees).	(+ more; − less)
3—Land Revenue	− 70
11—Forest	+ 2,23
19-A—Law and Justice	− 47
19-B—Jails	+ 1,83
20—Police	+ 1,70
22—Education	+ 1,68
24-A—Medical	+ 1,23
24-B—Sanitation	+ 1,73
26-A—Agriculture	+ 1,22
29—Superannuation	+ 1,53
30—Stationery and Printing	+ 7
32—Miscellaneous	+ 9,93
33—Famine Relief	− 5,57
42—Irrigation Major Works	+ 2,78
43—Irrigation Minor Works—	
Civil	− 30
Public Works Department	+ 99
45—Civil Works—	
Civil	− 6,77
Public Works Department	+ 8,24

439. Savings under Survey and Settlement (owing to an over-estimate of the cost of the Sind-Sagar Survey), under Grain Compensation and Exchange Compensation Allowances and postponement of the formation of the new Sheikhupura District have affected the expenditure under "3—Land Revenue." The reduction of charges under "19-A—Law and Justice" is due to economies in contingencies, salaries, diet money of witnesses and to the transfer to "3—Land Revenue" of certain charges in connection with the process-serving establishment. The only other heads exhibiting a reduction of expenditure are "33—Famine Relief," "43—Irrigation Works, Minor, in charge of Civil Officers" and "45—Civil Works, in charge of Civil Officers." The reasons for the reduced expenditure under Famine Relief are obvious, the plentiful rains preventing any scarcity of fodder. The assignments to District Boards for the upkeep of minor works having been absorbed in the new consolidated grants the expenditure under the head "43—Irrigation" has been correspondingly reduced; and similarly under "45—Civil Works, in charge of Civil Officers," the saving of nearly 7 lakhs is due to the transfer of provision for grants to District Boards from this head to "32—Miscellaneous." Most of the other expenditure heads record increases. In the case of Forests additional expenditure necessary for starting departmental extraction of timber in the Bashahr Division and for increasing the supply of wood to the army in Rawalpindi Division, extra stores for the Jallo Resin Factory and larger payments of water rate for the irrigated plantations have, despite certain economies on salaries of officers on deputation, etc., caused a rise in the figures. Under head "19-B—Jails" the high range of prices is responsible for the additional expenditure incurred on clothing and bedding of prisoners, while Jail manufactures continue to expand to meet military requirements.

REVENUE AND FINANCE.

More than half of the increase under "20—Police" is due to the higher expenditure under District Executive Force in which minor head is included provision for the reclamation of Criminal tribes. The payment of certain arrears to the East Indian Railway on account of the rent of quarters for watch and ward staff accounts for the enhanced expenditure on Railway Police. Under the head "22—Education" the increase of one lakh in grants-in-aid, which forms the major part of the total excess, is somewhat obscured by the change in accounts procedure according to which payments in support of municipal or local schools are classified under grants-in-aid. A rise of Rs. 98,000 under Hospitals and Dispensaries is the main cause of the larger figures under "24-A—Medical." The figures for "24-B—Sanitation" have been affected by the grant of an additional lakh to the Sanitary Board and of Rs. 40,000 to the Simla Municipal Committee in connection with the Bemloe Sewage Scheme. The wheat profits windfall gave Government the opportunity of spending more on agriculture, and the figures of the year under report have been increased still further by an excess in the purchase of serum for the Veterinary Department. The attractions of the War Loan have induced pensioners to commute portions of their pensions with a view to investment and have caused a certain inflation in the figures for Superannuation Allowances and Pensions. Increased prices account for the excess under "30—Stationery and Printing." The large difference under "32—Miscellaneous" is counterbalanced by a saving under "45—Civil Works," due to the change in classification of grants to District Boards. The rate of interest on debt has again increased, adding nearly two lakhs to the charges payable by this province on this account. Heavy expenditure on repairs owing to floods and certain accounts adjustments have also helped to make the total of expenditure under "42—Irrigation Major Works" heavier than in 1916-17. Under "43—Irrigation Minor Works, in charge of Public Works Department," the Bhakra dam scheme, the investigation of a proposal to construct a small canal in the Pind Dadan Khan Tahsil of the Jhelum District and the transfer to this head of the charges for the Kitchin-Irving Canal and Dane Dam and Canal have added to the expenditure, while the figures for "45—Civil Works, in charge of Public Works Department Officers," have been affected by the purchase of houses in Simla for officers, and by the expenditure on repairing the damage done by the earthquake in Dharmsala.

45.—Local Funds.

440. The gross income of District Boards was Rs. 83,16,600 which exceeded by over $4\frac{3}{4}$ lakhs that of the previous year and was the highest yet attained. Only $1\frac{1}{2}$ lakhs of the increase was accounted for by local rate, the enhancements in the rate not having had their full effect during the year.

441. Variations in income and expenditure under the more important heads have already been discussed in section 24.

46.—Municipal Funds.

442. The total receipts of municipalities in 1917-18 amounted to no less than Rs. 98,41,909 as compared with Rs. 82,00,418 in the previous year. This striking increase is accounted for partly by the increased receipts from octroi already referred to in section 25 and also by larger Government contributions. The figures are also swelled by the Lahore Municipal Committee's withdrawal from deposit with a bank of a sum of eight lakhs, which was subsequently invested in the War Loan. Rs. 76,669 was realized as interest on investments during the year as against half a lakh in 1916-17. There have been slight increases in the proceeds of special taxes and a slight decline in receipts from water-rate at Rs. 62,813. Sale-proceeds of water have, however, risen to some small extent. Fees from educational institutions have increased by over Rs. 2,000 to Rs. 1,71,002, but receipts from medical institutions (Rs. 25,551) are practically stationary. There has been a substantial increase in Government grants from Rs. 7,38,203 to Rs. 9,44,281.

CHAPTER VI.

VITAL STATISTICS AND MEDICAL SERVICE.

Detailed information on the subjects dealt with in this chapter will be found in the reports and statistical tables noted below :—

PROVINCIAL REPORTS.

Census—Report on the census of the Punjab, 1911, by Rai Bahadur Pandit Hari Kishen Kaul, C.I.E.

Births and Deaths— *Sanitation*— } Report on the Sanitary Administration of the Punjab and Proceedings of Sanitary Board for the year 1917.

Emigration—Census Report as above.

Medical Relief— { Report of the working of the Charitable Dispensaries in the Punjab for the year 1917.
Report of the Pasteur Institute, Kasauli, for the year 1917.
Report on the working of the Punjab Lunatic Asylum for the year 1917.

Vaccination—Report on Vaccination in the Punjab for the year 1917-18.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Statistical Abstract for British India, Volume III—Public Health.

47.—Details of Census.

[*Vide* pages 157-67 of the Administration Report for the year 1911-12.]

48.—Births and Deaths.

443. The rough estimated population prepared by adding births and subtracting deaths since the last census report works out in 1917 to 21,005,233 (11,506,888 males and 9,498,345 females) as against the census population of 19,337,146 (10,608,101 and 8,729,045). Calculated on the population thus estimated the birth rate was 41·7, or 3·6 less than the rate calculated on the census population, and similarly the death-rate at 34·9 was less by 3·0. The estimated population is in excess in all the districts of the Province except Simla. **General.**

444. Previous to the three last months of the year when malaria caused a high death-rate, the year 1917 was a healthy one, the birth-rate was average and the death-rate low. Cholera prevailed only to a slight extent, small-pox gave the lowest rate in recent years, plague, though worse than in 1916, showed a less rate than that recorded for some years, while the rates under other heads of mortality were about the average.

445. The birth-rate amounted to 45·3 *per mille, i.e.,* ·3 less than it was last year and ·1 in excess of the quinquennial average. The actual number of births was 876,733, of which 459,273 were males and 417,460 females. Though less than last year the birth-rate is quite satisfactory. In the first 5 months and in October the births were in excess, from June to September they were considerably less, slightly less in November and a good deal less in December. The birth-rate in the 38 principal towns of the Province, those with a population of 10,000 or upwards, amounted to 46·2 *per mille*; this rate is 0·8 less than it was in 1916 and 1·1 more than the average for the previous 5 years. Among districts Rohtak this year recorded the highest birth-rate, namely, 55·4. The lowest rate as usual was recorded in Simla 22·2, while next in order came Dera Ghazi Khan with 28·1 **Births.**

446. The death-rate during the year under report amounted to 37·9, which is 7·2 *per mille* in excess of the rate recorded in the year **Deaths.**

VITAL STATISTICS AND MEDICAL SERVICE.

preceding and 6·7 compared with the average for the previous 5 years. The actual numbers were 733,109 deaths (378,785 males and 354,324 females). This high death-rate is due entirely to fevers which accounted for no less than about 70 per cent. of the total deaths registered. The rates for dysentery and diarrhœa remained the same as in the previous year, while under cholera, small-pox and all other causes there was a slight decrease; under the other heads of mortality, fevers being omitted, there was a slight increase.

447. With seven exceptions, Karnal, Hoshiarpur, Jullundur, Ludhiana, Gujrat, Jhelum and Rawalpindi, the death-rate by districts was in excess of the average for the previous 5 years. The highest death-rate—52·0—was recorded in Gurgaon (in which district, however, the birth-rate was also very high—54·5). The lowest rate was recorded as is usual in Simla, 26·3, but this was followed closely by 28·7 in Jullundur and 28·9 in Hoshiarpur.

448. The healthiest month of the year was February, when the rate recorded was 1·91; this was closely followed by 2·04 in August, 2·06 in July, 2·20 in June, 2·21 in March and April, 2·35 in May, 2·45 in January and 2·94 in September. The first indication that malaria was likely to be widespread and likely to assume an epidemic form was the increased death-rate in September, followed by a higher one in October, 5·86. The highest rate recorded was in November 6·75, but the rate again fell to 4·92 in December. The rate in the last quarter equalled the rate recorded in the first 8 months of the year. Mortality among infants is still very high, the figures standing at 267·5 for males and 256·6 for females per thousand. The rural and urban death-rates were 37·43 and 42·77, respectively, as compared with 30·28 and 34·98 last year. Amritsar recorded the highest death-rate among the three largest towns of the Province, 66·58 as against 39·94 in the previous year and 41·63 the quinquennial average. Multan came next with 52·67 against rates of 35·21 and 32·22 for last year and the quinquennial average, while at Lahore the corresponding rates were 44·40, 36·47 and 33·98. These high rates were due to excessive fever mortality in Lahore and Multan and fever and respiratory diseases in Amritsar.

Cholera.

449. Cholera showed no marked prevalence. Altogether there were 1,365 deaths, *i.e.*, 286 less than in the previous year, the mortality rate being 0·07 *per mille* as compared with 0·09 in 1916 and 0·30 the average for the previous five years. This good result is doubtless very greatly due to the early preventive measures taken and to better knowledge of the manner in which the disease is spread. With the exception of three deaths the Province was free from cholera in the first half of the year, but it assumed serious proportions in the months of September and October when 628 and 463 deaths, respectively, were recorded. In November there were 86 deaths and in December the Province became free. Only in one instance was an outbreak traced directly to the Hardwar pilgrim route, but it is probable that the epidemic at Jagadhri originated in that vicinity. An outbreak of cholera in Multan caused some anxiety to the Military Department on account of the Army Clothing Factory there, as it was reported that some of the employees had contracted the disease and it was thought that the clothing might become contaminated; successful measures, however, were taken to check the disease.

450. The conditions prevailing at Multan are very unsatisfactory, the drainage and water-supply are bad and nothing but the introduction of a proper drainage system and a piped water-supply, for which arrangements are being made, can protect the town from recurrences of outbreaks of this and other diseases.

451. At Jagadhri great difficulty was found, as at Panipat last year, in discovering and disinfecting the numerous wells, public and private. The sub-soil water at Jagadhri is so near the surface that it costs little to sink a well and almost every man can afford the luxury of having his own water-supply, and incidentally one that can easily be fouled, in his own compound. The heavy rains this year raised the sub-soil level so high and

caused such a large amount of surface flow into the badly constructed and protected wells as to make it extremely difficult to keep them free from contamination and rendered it necessary to disinfect them repeatedly before the desired effect was obtained. If a piped water-supply is not introduced into a town, where such conditions prevail, the next best thing is to encourage use the of tube wells; in some places, as in Hoshiarpur and Ferozepore, many of the people are well aware of the protection so afforded against water-borne diseases, but owing to the war the increased cost of these wells has made their extended use almost prohibitive.

452. The total deaths from small-pox amounted to 1,417 as compared with 2,886 during the previous year. The death-rate amounted to 0·07 per 1,000 of population as against 0·15 in 1916 and 0·79 for the previous five years. This year's rate is the lowest on record since the introduction of the system of registration of births and deaths in this Province. The mortality rate from small-pox was highest in the districts of Gurgaon and Lahore. Small-pox.

453. There were 9,724 deaths in the Province compared with 4,151 in the preceding year. It was not a bad year on the whole, but there were as many as 4,084 deaths in the last two months, *i.e.*, nearly half the total, indicating from experience a bad epidemic in 1918. Rawalpindi and Jhelum in the north-west, Ambala in the east, and the districts of Lahore, Jullundur, Gurdaspur, Ludhiana and Gujranwala in the centre were worst infected, accounting for more than 76 per cent. of the total mortality. The case mortality was 69 per cent. as compared with 79 per cent. last year. The disease was chiefly bubonic in type. Plague.

454. There was a marked change in the seasonal curve. Usually there is a gradual rise continuing from January to April and then an abrupt fall. This year the rise extended over May, and though it dropped in June it was not till July that there was a very definite fall. This was associated with the unusual rainfall in the late spring. The fall in the seasonal curve reached its lowest in August when there were only 87 deaths; but from thence onwards the rise was much steeper than would generally be expected. The fact that infection was widely distributed probably accounted for this result, since six districts, *viz.*, Jullundur, Ludhiana, Lahore, Gurdaspur, Gujranwala and Rawalpindi, were rather badly affected.

As usual the measures depended upon were—

(*a*) ratting by means of traps, poison and smoke apparatus—concentrated round infected areas and in infected places during epidemics and in selected late infected villages during the off season,

(*b*) cresol fumigation and inoculation, where possible, during infection, and

(*c*) in some districts evacuation.

455. The city of Rawalpindi was, as usual, an important centre for the distribution of the disease. Barium Carbonate was used throughout the year as a rat poison with satisfactory results.

456. Under "Fevers" a total of 510,812 deaths was registered against 376,003 in 1916, showing an increase of 134,809 deaths. The death-rate was 26·42 against 19·44 in 1916 and a quinquennial mean of 16·68. The mortality from fevers was the highest on record since 1908, in which year it amounted to 697,058. The largest number of deaths was recorded in the last quarter of the year. The fever death-rate in all the districts in the province, except Kangra and Rawalpindi, was higher than that recorded in the previous year. The highest death-rate was recorded in Muzaffargarh 43·48, Multan coming next with 41·52, Gujranwala 41·36, Dera Ghazi Khan 40·85 and Montgomery 40·63. Fevers.

457. The increased mortality in those districts in the Province which showed a higher death-rate from fevers is attributable to the prevalence of malarial fever in an epidemic form in the last quarter of the year as the result of the excessive monsoon rainfall.

458. The urban and rural death rates from fevers were 21·46 and 26·91 compared with 14·87 and 19·90 in the previous year. These rates were lower than those in 1908 when they were 32·53 and 34·90. The three largest towns in the Punjab—Multan, Amritsar and Lahore—recorded rates of 30·46, 29·95 and 25·89, respectively, as against 15·78, 13·57 and 21·13 in the previous year and 23·80, 68·16 and 33·69 in 1908. It will be observed that in Multan the death-rate was very high, even higher than in 1908, and the chief cause of this increase was the very exceptional rainfall which amounted to 19·83 inches against 6·25 inches in 1916 No such heavy fall has been recorded in Multan in the last 20 years, for which period only are records available. The high fever mortality rate extended to the whole of the Multan Division, and it is of common knowledge that the country to the south-east, Bahawalpur and Sindh, participated, if anything to a greater extent, in this disastrous result of an exceptional autumnal rainfall occurring in what would be described, ordinarily, as an arid region.

49.—Emigration and Immigration.

459. Since the outbreak of war the passports system has been made universal and, except in the case of travellers from or to Ceylon, no one can now enter or leave India without a passport. Further, natives of India are prohibited from departing by sea out of British India for the purpose of, or with the intention of, labouring for hire in any country beyond the limits of India. This regulation is subject to certain exceptions. The emigration of Indians and their families to East Africa, Mauritius and the Federated Malay States is otherwise generally permitted, provided that the intending emigrants are of good character and antecedents, and that they are travelling for *bonâ fide* business reasons. But members of fighting classes in the Province are not permitted to leave the country for the purpose of obtaining employment in Colonial Police Forces, recruiting for which is prohibited during the war. Indians who wish to enter Mesopotamia must prove that the business which they propose to undertake in that country is such that benefit will accrue therefrom to the Expeditionary Forces employed there. In the case of Siam, the approval of His Majesty's Minister at Bangkok has to be obtained to the entry of any person into the country before a passport is granted to him.

50.—Medical Relief.

General.

460. The Medical Department, already much depleted, has had to meet further demands on its personnel for military service during the year, but its members have not spared themselves in combating the severe malaria epidemic that prevailed in the latter part of the year, and have cheerfully discharged the other additional duties that war conditions have forced upon them. While the Assistant Surgeons have shown themselves responsive to the call for volunteers for military service, it is a matter for deep regret that the same cannot be said of the Sub-Assistant Surgeons, whose general unwillingness to volunteer for field service outside India has come to be recognized as a standing reproach to their class.

Dispensaries.

461. Six new dispensaries were added during 1917, making the total number of institutions at the end of the year 480, representing roughly only one dispensary for every 41,000 of the population. The number is still decidedly inadequate in many districts.

Patients.

462. The total number of patients treated during the year was 5,440,696 (96,019 in-patients and 5,344,677 out-patients) against 5,051,811 (94,285 in-patients and 4,957,526 out-patients) in 1916, an increase of 388,885, of whom 1,734 were in-patients and 387,151 out-patients. Most districts contribute towards this increase.

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Statistics of disease.

463. The following abstract exhibits the more important diseases and conditions for which patients attended dispensaries during the year :—

Cholera	436
Dysentery	78,841
Enteric fever	2,008
Rheumatic fever and Rheumatism	87,655
Small-pox	170
Tubercle of the lung	4,582
Other tubercular diseases	4,519
Diseases of the Eye	1,031,151
Diseases of the Ear	434,202
Diseases of the Nose	26,409
Dyspepsia	296,238
Diarrhœa	54,352
All other diseases of the digestive system ...	552,138
Ulcers	413,119
Other diseases of the Skin	505,281
Injuries, general and local	209,551

464. One million six thousand eight hundred and sixty-six persons were treated for malaria at fixed hospitals and dispensaries and 97,357 by itinerating dispensaries; but in badly affected districts the people could not go to dispensaries for treatment, nor could the itinerating dispensaries reach them owing to the roads being rendered impassable through floods. Deaths from fevers according to the figures furnished by the Sanitary Commissioner numbered 510,812. Compared with 1916 there was a rise of 2,703 in-door and 315,702 out-door patients treated for malaria. As it became apparent that the heavy monsoon rains would be followed by an epidemic of malaria special measures were undertaken to cope with it. Quinine was freely issued, and one or more Sub-Assistant Surgeons provided with medical panniers were detailed to itinerate in each of the malarious districts: in all 26 itinerating dispensaries were put into operation.

Surgery.

465. Two hundred and fifty thousand six hundred and ninety-one operations were performed as against 266,475 in 1916. Of this number selected operations totalled 39,046 as compared with 40,642 in 1916, while the number of patients operated upon was 242,555 against 259,331. Much of this falling-off in selected operations performed was due to the widespread prevalence of malaria at a time when cases chiefly resort to dispensaries for operations. The same remarks apply to the very considerable reduction in minor operations; but in each case it was mainly owing to the reduction in the number of Assistant Surgeons available for civil work, due to their having joined the Military Department and to the increased time given to recruiting work. Of the 242,555 patients operated upon only 527 died, a percentage of ·22 as compared with ·20 of the previous year.

466. The districts in which the largest number of selected operations were performed were Ferozepore 9,906, Jullundur 2,861, Karnal 2,429, Amritsar 2,254, Gurgaon 1,731, Shahpur 1,628 and Hissar 1,534. Of the selected operations performed, extraction of the lens for cataract accounted for 14,778. Altogether 11,195 patients were operated upon and nearly 95 per cent. are reported to have obtained good vision.

Income and expenditure.

467. The total income of dispensaries fell from Rs. 16,43,273 in 1916 to Rs. 16,23,678 in 1917. There is a falling-off of Rs. 9,102 in Municipal contributions and Rs. 53,521 under head "Miscellaneous receipts." Government and local fund contributions, however, rose from Rs. 1,32,623 and Rs. 5,39,997 in 1916 to Rs. 1,54,724 and Rs. 5,49,428 in 1917, respectively. The increase in both cases is due to the rise in the cost of English

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medicines, and high cost of living generally. The income from subscriptions amounted to Rs. 1,10,622, of which 60 per cent. was contributed by Europeans and 40 per cent. by Indians. The system of charging fees from the well-to-do has not yet met with any measure of success. The total expenditure during the year was Rs. 14,69,492 against Rs. 14,50,679 in 1916. Although there was a total increase of Rs. 18,813 the expenditure on new buildings and repairs fell by Rs. 75,907 as, owing to the rise in the cost of building material and scarcity of labour, building operations had in many instances to be suspended. Expenditure on European medicines which was Rs. 2,35,325 in 1916 rose as a direct result of the war to Rs. 2,89,991. There was no marked rise in expenditure in the case of bazar medicines.

Female medical aid and education.

468. The Punjab Medical School for Women, Ludhiana, continued to meet the demands made upon it for trained assistance for service in Women's Hospital Wards and Dispensaries. The results for the final M. P. L. Diploma examinations were very satisfactory, all six candidates who entered for the examinations being successful. The number of non-Christians who, after much seeking, have been found sufficiently well educated and willing to go in for a medical education has been very small; only two such, a Hindu and a Muhammadan, were registered during the year. At the end of the year, of the total of 152 students in the school and hospital, only 31 were non-Christians (3 in the M. P. L., 1 in the Pharmacy and 27 in the Midwife class). For a considerable time most of the women qualified assistants must necessarily be Christian. A post-graduate course for women Sub-Assistant Surgeons was held at Simla during June and July at which lectures and demonstrations were given. At the end of the course, which proved a great success, examinations were held and prizes awarded to successful candidates.

469. Classes for the training of Indian midwives were carried on at Bhiwani (Hissar District), Ludhiana, Ferozepore, Lahore, Amritsar and Multan. The Victoria Memorial Scholarship assists the Lahore and Amritsar Classes; the others are maintained from funds made available by local bodies. The scheme for the establishment of a Central Training School for midwives at Amritsar, as also one for providing similar schools at local centres, are now before the Local Government, and although it is not altogether certain that such schemes will be by any means an adequate solution of the problem, they at least form a basis on which to found larger and more thorough projects in the future.

470. Meantime the number of women (excluding children) attending hospitals continues to increase, the figures for this year being 30,760 in-patients, and a daily average of 7,105 out-patients.

Military Dressers.

471. The training of young men as Military Dressers for work with Indian troops overseas continued throughout the year. At the end of 1916 the districts of Ferozepore, Amritsar, Gurdaspur, Gujranwala, Gujrat and Sialkot were engaged in this work, but other districts took it up and new centres were opened at Mianwali, Montgomery, Jhelum, Hissar, Rohtak, Montgomery, Dharmsala, Jullundur and Sargodha and more recently at Rawalpindi and Hoshiarpur. By the end of 1917 14 districts were training men; and between them they had in all turned out 682 dressers since the scheme was initiated. Of this number 427 were accepted by the Military Department and 162 were under training on 31st December. The cost of scholarships during training amounted to Rs. 29,640, which was met from subscriptions from the public, District Boards and Red Cross Fund.

Departmental institutions.

472. The total number of patients treated in departmental institutions was 7,831 in-door and 708,490 out-door, and 17,142 operations were performed. Useful work continues to be done by those canal dispensaries which are open to the public.

Non-aided dispensaries.

473. At the non-aided dispensaries which furnished statistics 44,348 males and 46,093 females were treated, and 3,740 operations of all kinds were performed: these dispensaries all belong to Missionary bodies and the number of them fluctuates yearly.

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PUNJAB LUNATIC ASYLUM.

474. The rise in the number of inmates and the daily average strength of the Asylum continues. The latter which amounted to 837·03 was the highest on record. There was an appreciable decrease as compared with last year in the number of patients discharged as "cured," but the number of those discharged as "improved" has increased.

475. A special feature was the number of military patients—123, admitted from the various expeditionary forces; as many of them were only slightly affected by shell-shock or by privation they made a rapid recovery.

476. There was no epidemic of disease during the triennium and the general health of the patients was good. The daily number of sick—about 10 per cent. of the population—is about the same as in previous years and may be regarded as creditably low. A more disquieting phenomenon has been the rise in the death rate, due especially to tubercle and pneumonia, but the autumns of 1916 and 1917 were both unhealthy and tended further to lower the vitality of a class already very susceptible to disease.

477. Every effort continues to be made to provide occupation for the patients, and the advent of the military patients has stimulated the popularity of gymnastics. It is a matter for satisfaction that 50 per cent. of the inmates are now provided with regular work, and that the garden continues to provide all the vegetables the institution requires.

478. The difficulty of accommodation is becoming acute: the necessity for establishing a separate enclosure solely for criminal lunatics has been recognised and the question of acquiring land for the purpose is receiving the attention of Government.

THE PASTEUR INSTITUTE, KASAULI.

479. The number of persons inoculated against rabies at the Pasteur Institute, Kasauli, was 5,206, out of which large number only 44 cases were classed as failures; of those treated, 382 were Europeans and 4,824 were Indians. As the provincial laboratory of the Punjab, the Institute was also called upon to examine and report on 1,560 cases as compared with 988 in the previous year.

51.—Sanitation.

480. The Sanitary Board met five times, twice in Lahore, twice in Simla and once in Montgomery. The balance of Rs. 1,39,768 was fully utilized. A fresh grant of 4 lakhs was placed at the disposal of the Sanitary Board for allotment during 1917-18, and from this grants-in-aid aggregating Rs. 30,506 were made up to 31st December 1917, leaving a balance of Rs. 3,69,494 which will be accounted for in the next year's report. The whole of the grant of 4 lakhs for 1917-18 was fully utilized as also a sum of Rs. 84,111, out of an additional grant of one lakh placed at the disposal of the Board. The sphere of the work of the Board was extended in that Government has referred a number of cases for its opinion which have required no little deliberation and discussion. Sanitary Board.

481. The Board is on the whole satisfied that there has been some advance in the demand for the sanitation of villages, especially in the Sialkot District where a number of small schemes of improvement have been carried out with funds partly provided by the localities concerned. It is, however, extremely difficult to get villagers to change their customs, and until they themselves show some inclination to improvement it is hardly possible to help them. Village sanitation.

482. The annual grant of Rs. 200, which has been given to the Society for Promoting Scientific Knowledge since 3rd October 1911, was increased by Government from the 1st April 1917 to Rs. 1,000 per annum. The Sanitary Board gave a grant of Rs. 23,139 towards the erection of a building and equipment of a building consisting of a lecture hall to Society for Promoting Scientific Knowledge.

accommodate 500 persons, offices, class rooms and sanitary museum, while the site was given by the municipality on a nominal rental. The building was completed and opened in November 1917.

52.—Vaccination.

483. The cost of the department amounted to Rs. 1,30,591, a decrease of Rs. 12,583, compared with the figures for the previous year.

484. The average cost of each successful vaccination was Re. 0-3-0 as compared with Re. 0-3-1 in the previous year.

485. The total number of operations performed by all establishments was 804,229, showing a decrease of 104,409. Of this number 621,650 were primary and 182,579 re-vaccinations, as compared with 705,338 and 203,300, respectively, in the previous year. The decrease of 83,688 in primary vaccination is held to be due to fewer infants being available for vaccination in consequence of the high infantile mortality that occurred during the widespread epidemic of malaria in the autumn of 1917. The decrease of 20,721 in re-vaccinations is said to have been due to re-vaccination being performed in those parts of the Province which were relatively less populous than in those in which re-vaccination was carried on last year, also to the very marked lessened prevalence of small-pox and the greater prevalence of malaria.

486. The percentage of males and females to total number of re-vaccinations was 65·95 in the case of males and 34·05 in that of females as against 66·98 and 33·02 in the preceding year. The percentage of success in primary vaccination was 98·25 as against 95·22 in the previous year, while in the case of re-vaccination it was 77·16 as compared with 71·89. This satisfactory result may well be due to the training of the vaccination staff in the Punjab Vaccine Institute. The percentage of vaccinations in which results were not known to the total number in 1917-18 was 4·80 in the case of primary and 18·71 in that of re-vaccination as compared with 5·31 and 19·64, respectively, in the year preceding.

Punjab Vaccine Institute.

487. The total number of tubes issued by the Punjab Vaccine Institute was 49,087 as compared with 42,438 in the previous year. Of the 20,298 tubes sent out of the Punjab 13,236 tubes or 1,058,880 doses of vaccine were supplied for the overseas forces.

488. Out of the 49,087 tubes issued during 1917-18 results were received in the case of 23,649 tubes, showing that 722,459 primary and 168,67- re-vaccinations were performed with an insertion success of 97·33 per cent. in primary and 73·91 per cent. in re-vaccination as against 93·98 and 67·53, respectively, in the previous year.

CHAPTER VII.

INSTRUCTION.

Detailed information on the subjects dealt with in this chapter will be found in the report and statistical tables noted below :—

PROVINCIAL REPORTS.

Education.—(1) Report on the Progress of Education for the year 1917-18.

(2) Report on the operations of the Department of Agriculture, Punjab, for the year ending 30th June 1918.

(3) Annual Report on the Punjab Veterinary College and the Civil Veterinary Department, Punjab, for the year 1917-18.

Arts and Sciences.—Report on the working of the Lahore Museum for the year 1917-18.

PUBLICATIONS OF THE GOVERNMENT OF INDIA.

Education, Literature and Press.—Statistics of British India, Volume V, Education.

Statistical Abstract for British India, Volume IV, Administrative, Judicial and Local Self-Government.

53. General System of Public Instruction.

[*Vide* pages 173-184 of the Administration Report for 1911-12.]

54.—Education.

489. For the first time there is a decrease both in the number of schools and in the number of pupils attending them, the largest decrease being under the head of private institutions. General summary.

490. Though there was an increase of 174 in the number of public institutions for males, there was a decrease of 1,666 in the number of scholars attending them, chiefly in primary schools, which is attributed by Inspectors to sickness and the war. Owing to recruiting and other war activities Deputy Commissioners and members of District Boards were unable to devote as much attention as usual to the needs of rural education. But there has been no real set-back. The number of students in colleges and secondary schools shows an increase, and public expenditure on education rose from 109 to 115 lakhs.

491. The year opened with a general Education Conference at Lahore in April 1917, in which the teaching of English, the use of the vernacular medium, provident funds, grant-in-aid rules, the training of Oriental teachers, etc., were discussed. The most important of its recommendations, *viz.*, the use of the vernacular as a medium of instruction in the Middle Department for all subjects save English, was adopted at once.

492. Under the orders of the Local Government, an educational survey of each district was made. This forms the basis of the scheme for the expansion and improvement of vernacular education introduced during the current year. A District Board Educational Finance Committee appointed by Government met in October and recommended among other things —(1) that the improvement and expansion of education in rural areas should proceed in accordance with definite five-year programmes administratively sanctioned by District Boards, (2) that Government should bear a fixed proportion of the cost of each programme, according to the resources of each District Board, (3) the provincialisation of Board Anglo-Vernacular Schools, English being introduced as an optional subject in vernacular middle schools, and (4) the assimilation of the status of District Inspectors to that of Assistant Inspectors.

493. A Bill for the introduction of compulsory primary education was published for opinion in October 1917, but was introduced into council during the current year.

494. The draft Bill contains a section permitting local bodies to remit fees for any of the boys required to attend school under the Act, provided that reasonable compensation is paid to institutions under private management for any loss in fee income entailed on them by such remission.

495. The standing committee on technical and industrial education submitted to Government proposals for the reform of industrial schools. These proposals were circulated to local bodies for opinion.

496. A scheme for a University diploma in commerce was submitted by the Education Department to the University.

497. The Imperial Government made a recurring grant of Rs. 1,75,000, which it was decided to utilise in—

(*i*) strengthening the staff of the Central Training College in order to admit more students, and to provide for the training of Oriental teachers;

(*ii*) the opening of four normal schools for women at centres outside Lahore;

(*iii*) the opening of an additional normal school for men in the Lahore Division;

(*iv*) the revision of the subordinate Educational Service, especially with a view to improving the pay of Oriental teachers;

(*v*) special grants to aided schools for the encouragement of provident funds (a form of expenditure suggested by the Government of India).

498. Pending the introduction of these measures, it was decided to use the money immediately available for the construction of normal schools.

499. A central site for a hostel for the Government College, Lahore, was purchased for Rs. 1,17,793.

500. Apart from European schools, teachers or students of the primary and secondary schools furnished over 7,000 recruits to the army, while the schools and colleges invested 6 lakhs in the war loan and subscribed 1½ lakhs for objects connected with the war.

Controlling agencies.

501. The Hon'ble Mr. J. A. Richey took over charge of the post of Director of Public Instruction from Mr. J. C. Godley, C.S.I., on 1st April 1917. Lala Hari Das succeeded the late Khan Sahib Khalifa Imad-ud-din as Inspector of the Ambala Division and S. Maqbul Shah, Assistant Inspector, was promoted to the post of second Inspector, Jullundur. Mr. Sanderson, Inspector of European Schools, was permitted to join the Military Department, though he has been carrying on the office work of his civil appointment. The Department lost a valuable officer by the death of Lala Labhu Mall, Assistant Inspector.

502. The system of placing Assistant District Inspectors in charge of tahsils has been more widely extended and has proved very satisfactory.

District Boards.

503. The total expenditure by District Boards fell from Rs. 25,40,260 to Rs. 22,79,372. Of the latter sum, Rs. 12,71,781 was contributed by grants from Provincial revenues. Inspectors report satisfactorily on the management of education by District Boards, though there was little expansion during the past year.

Municipalities.

504. Municipalities cannot as yet be said to be fully awake to their responsibilities in the matter of education, though their expenditure from their own resources rose from Rs. 3,95,670 to Rs. 4,24,996.

Collegiate education.

505. The number of Arts Colleges rose from 10 to 11 by the opening of the Guru Nanak Khalsa College, Gujranwala. The number of students attending them increased from 4,221 to 4,597, the largest increase

being in the attendance at aided institutions. Expenditure increased by nearly Rs. 20,000 to Rs. 6,65,093. Fees showed a rise of Rs. 21,133, while subscriptions and donations fell off by some Rs. 9,000. The staff of the Government College at Lahore was strengthened by the appointment of a Professor of Zoology.

506. At the Forman Christian College at Lahore a new block for classes in Industrial Chemistry was completed at a cost of Rs. 40,000, half of which was met by a Provincial grant. At the Khalsa College, Amritsar, a new block of 50 cubicles was built at the cost of Rs. 24,000 subscribed by His Highness the late Maharaja of Faridkot, and the chemistry laboratory was extended at a cost of Rs. 22,000, of which Government provided Rs. 10,000. More than two-thirds of the students are Sikhs, the number of Sikh students having trebled in the last three years.

507. The Lal Chand memorial library of the Dayanand Anglo-Vedic College at Lahore was completed during the year.

508. Some Rs. 80,000 were collected during the year for the building fund of the Sanatan Dharm College at Lahore and Rs. 10,000 were spent in purchasing adjacent land.

509. The number of recognised secondary schools rose from 413 to 426 and the number of scholars from 110,348 to 110,839. The new institutions consist of 8 new high schools and 5 new Anglo-Vernacular middle schools. The total direct expenditure rose from Rs. 28,23,739 to Rs. 29,91,845, about half of which was met from fees. The percentage of trained teachers rose from 65 to 66. Secondary Education (Boys).

510. The introduction of practical agriculture and optional English in Vernacular Middle Schools is under consideration. The results of the special drawing and drill classes at Murree and Lahore, respectively, were quite satisfactory, justifying their continuance annually in future.

511. Medical inspection has been suspended owing to the Medical Inspectors having been recalled for military duty. Miscellaneous.

512. The revision of grant-in-aid rules was further discussed at a conference of Inspectors in January 1918.

513. Revised standard plans for hostels and double-sectioned High Schools were drawn up by the Consulting Architect to Government.

514. In view of the special conditions created by the war the building programme of the department has been, to a large extent, in abeyance.

515. There was an increase of 164 in the number of primary schools, but a decrease of 2,479 in the number of pupils, the figures on March 31st being 5,077 schools and 243,149 scholars. Primary Education (Boys).

516. The activities of the Rupar Primary School Association which opened 10 schools deserve special mention. The success of this useful pioneer movement is largely due to the financial support of Rai Sahib Lala Banarsi Das of Ambala.

517. Expenditure increased from Rs. 15,67,402 to Rs. 16,77,222, a very large proportion of which was met from provincial grants to local bodies. The number of trained teachers increased from 5,150 to 5,380 out of a total number of 10,036. A number of steps have been taken in the Jullundur Division to improve the efficiency of the teaching, *e.g.*, the introduction of Drawing and Handwork and of the "Look and Say" method of teaching reading in some primary schools.

518. Instruction in primary schools is still in many cases poor owing to the excessive number of classes per teacher. Proposals have been made to remedy this evil.

519. There was a serious loss in accommodation owing to the destruction of *kacha* school houses by the exceptionally heavy rains, but three Inspectors report increased help from villagers in the matter of rent-free sites and buildings or contributions towards the erection of school houses.

INSTRUCTION.
Training of teachers.

520. There were 1,085 men and 323 women under training, an increase over last year's figures of 61 women, but a decrease of 89 men owing to the closure of some of the local training classes. Proposals were submitted to the Government of India for a complete revision of the staff of the Central Training College. This college and the normal schools showed very satisfactory results in the examinations. The number of students in the Normal School for Women rose to 121. The majority of the students of the Sanawar Training Class who had gone to the war returned and finished their courses. A grant of Rs. 50,000 for two years and of Rs. 25,000 in subsequent years was given by the Government of India for this institution. Arrangements were made in St. Denny's School, Murree, for the training of a limited number of Kindergarten teachers.

Professional, Technical and Industrial Education.

521. The number of lecturers in the Law College increased from 2 to 5 and the tutorial system was introduced. The number of students at the Medical College rose from 232 to 289. The standard of instruction in the Veterinary College is gradually rising, attracting men of higher qualifications. The number of students in the senior classes of the Ludhiana Medical School for Women rose from 48 to 62.

522. The Lyallpur Agricultural College worked for the first time as an affiliated college and the first year course was that leading to the University degree. The demand for admission rose to 180 in 1917, many of the candidates being first class matriculates. The Rasul School of Engineering showed excellent results. The surveying course is second to none in India, but the work in the draftsmen's course might be more practical.

523. There was a decline in the number of students attending the Mayo School of Arts at Lahore. This is due to the great demand for artisan labour caused by the war, which induced many students to leave before the completion of the course. The work of the institution maintained its usual high level.

524. The Reformatory School at Delhi did very good work, but its great powers for good are not fully realized by the Magistracy. The Clerical and Commercial Classes at Amritsar, which were transferred to the Government High School, have obtained a new lease of life. A Clerical and Commercial examination was conducted for the first time by the Education Department on the results of which certificates were awarded.

Female Education.

525. The number of schools for Indian girls rose from 990 to 1,015 including one new high school, 3 new middle schools and 21 new primary schools. The number of pupils, however, rose from 51,496 to 51,987 only.

526. The third year class in connection with the Kinnaird College was opened with 5 students. There were 5 girls preparing for the B.A. degree at other arts colleges.

527. Secondary schools are, as a rule, well equipped, their chief lack being play-grounds and the staffs are generally well qualified; but the number of trained teachers in primary schools increases but slowly. Some mechanical proficiency is attained in the teaching of the three "Rs"; when intelligence is needed, the deficiencies of the untrained teachers become apparent. The small staff of Inspectresses could not cope with the work of constant supervision and instruction in method.

Education of Europeans.

528. The number of public schools remained the same, *viz.*, 34, and the number of pupils increased by 61 to 3,011. The total expenditure from all sources rose from Rs. 9,32,170 to Rs. 9,75,345. Increased staff grants indicate an increase in the rates of salaries and in the number of trained teachers. Serious difficulty is being felt owing to the war in recruiting masters for boys' schools.

529. The provision of a good water-supply and other improvements were effected in the Sanawar Military Asylum. A babies' department was opened to admit babies whose mothers have died while their fathers are

on active service. The Lawrence School, Ghora Gali, did exceptionally well in examinations. It had 240 boys and 121 girls on roll. The Sanawar and Ghora Gali institutions continued to do useful work in other directions.

Education of Special Classes.

530. There was an increase of Muhammadans in Colleges and Anglo-Vernacular Secondary Schools, but not in proportion to the increase shown by other communities. Out of 154,936 non-Brahman Hindus in public institutions there were 1,950 Jains.

531. The formation of a Mounted Cadet Corps, the training of junior boys on the lines of the Boy Scout movement and the enhancement of the fees were among the changes made in the Aitchison College.

532. Sixteen new schools were opened for low-caste children and three such institutions were closed.

The Text-Book Committee.

533. The total number of books considered by the committee was 384 against 500 in the previous year. The decline in the quantity and quality of the books submitted for awards from the Patronage of Literature Fund has led to the decision that the prizes should be fewer and of higher value, that works of real worth only should be submitted, and that any balance in the fund should be utilised in the purchase and distribution to schools of good vernacular literature. At the suggestion of the Text-Book Committee, Government has taken up the question of the standardisation of technical terms in vernacular, for which 6 sub-committees have been appointed.

55.—Literature and the Press.

LITERATURE.

534. The slight decrease in the number of publications is due to the enormous rise in the price of paper. While the number of original works and translations has fallen, that of republications has slightly risen. Poetry and religion are, as usual, responsible for the largest number of publications. Some biographical works in Urdu clearly indicate the fact that broad-minded people of all denominations have begun to appreciate what is worthy of admiration in the great men and women of other communities or nations. The Urdu version of Colonel Pease's "Contagious Diseases of Animals" is a unique work of its kind. The war formed the subject of about 30 poetical works and the pressing questions of moral and social reform (temperance, widow-marriage, etc.), that of 40. There was no book worth the name on "Voyages and Travels."

535. The literary output of the year is on the whole poorer in quality as well as quantity than that of the last year, especially in drama, fiction and history.

PRESS.

Newspapers.

536. The total number of newspapers and periodicals of all kinds published in the Punjab during the whole or part of the year under report was 268. The figure for the preceding 12 months was 261. There were 216 papers and periodicals in existence at the end of the latter year as against 211 in existence at the close of 1916. Fifty-seven periodical publications were started during the year and 52 ceased to exist during the same period.

537. Of the 268 newspapers and periodicals, 171 were in Urdu, 61 in English, 22 in Gurmukhi, 10 in Hindi and 4 bi-lingual. The number of daily papers was 18, weekly 71 and monthly 149. The remaining papers appeared at irregular intervals. Of the 18 daily papers, 5 were in English, one in Hindi and the remaining 12 in Urdu, of which 4 represented the Hindu and 7 the Muhammadan community, the twelfth being a war publication.

538. One hundred and fifty-six newspapers and periodicals were published in Lahore and 43 in Amritsar. The other centres of activity were

Simla (14), Gurdaspur District (10), Sialkot (7), Rawalpindi (6), Gujrat, Ferozepore and Gujranwala (5 each) and Jullundur (4).

Circulation.

539. The total circulation per issue of all papers was, as far as could be ascertained, about 246,000, as compared with about 270,000 and 284,000 in 1916 and 1915, respectively. The following were the more important papers in the province :—

English.

1. *Civil and Military Gazette* (Anglo-Indian, daily).
2. *Tribune* (Hindu, daily).
3. *Panjabee* (Hindu, daily).
4. *Bulletin** (Hindu, daily).
5. *Khalsa Advocate* (Sikh, weekly).
6. *Observer** (Muhammadan, bi-weekly).

VERNACULAR.

(*a*) *Urdu.*

7. *Hindustan* (Hindu, weekly).
8. *Himala* (Hindu, weekly).
9. *Paisa Akhbar* (Muhammadan, weekly)
10. *Loyal Gazette* (Sikh, weekly).
11. *Parkash* (Arya, weekly).
12. *Arya Gazette* (Arya, weekly).
13. *Vakil* (Muhammadan, bi-weekly).
14. *Al-Munir* (Muhammadan, weekly).
15. *Sitara-i-Subah** (Muhammadan, daily)
16. *Rajput Gazette* (Hindu, weekly).
17. *Akhbar-i-'Am* (Hindu, weekly).
18. *Urdu Bulletin* (Hindu, daily).
19. *Khalsa Akhbar* (Sikh, weekly).
20. *Sanatan Dharm Parcharak* (Hindu, weekly).
21. *Ahl-i-Hadis* (Muhammadan, weekly).
22. *Desh* (Hindu, daily).
23. *Paisa Akhbar* (Muhammadan, daily).
24. *Public* (Hindu, daily).
25. *As-Sabah** (Muhammadan, daily).
26. *Al-Fazal* (Ahmadia, bi-weekly).
27. *Kashmiri Magazine* (Mhammadan, weekly).
28. *Watan* (Muhammadan, weekly).
29. *Al-Asar** (Muhammadan, daily).

(*b*) *Gurmukhi.*

30. *Khalsa Samachar* (Sikh, weekly).
31. *Panth Sewak* (Sikh, weekly).
32. *Punjab Darpan* (Sikh, weekly).

540. Of these the circulation of Nos. 7 and 8 was claimed to be above 4,000; of Nos. 1, 2, 9 and 10 above 3,000; of Nos. 11, 12 and 30 above 2,500; of Nos. 13 and 14 between 1,500 and 2,000; of Nos. 15—21 and 32 above 1,000; and of the rest between 500 and 1,000.

* Have since stopped publication.

541. The decrease in the circulation of newspapers may be attributed to the increased cost of paper and printing requirements owing to the war, though it is probable that at no time was the newspaper-reading public so large, popular interest being stimulated by political events.

Executive action.

542. The total number of declarations under sections 4 and 5 of Act XXV of 1867 filed during the year was 288; 61 presses being declared or re-declared under section 4, and 227 newspapers under section 5.

543. Security was demanded on 26 occasions by District Magistrates on original declaration or on re-declaration or by varying a previous order. In three of these cases, the demand was made on re-declaration owing to the objectionable tone of the papers concerned. No demand was made by the Local Government in the year under report.

544. Action under the Defence of India (Consolidation) Rules, 1915, was confined to the imposition of pre-censorship on the *Sitara-i-Subah* (daily and weekly). An order was also issued to all newspapers in the province prohibiting the publication of any account of the proceedings of the meeting held at Lahore on the 28th June 1917 to protest against the Madras internments, but it was subsequently cancelled.

545. Formal warnings were administered through District Magistrates to newspapers and periodicals as follows :—

(*a*) Seven for publishing articles open to exception on political grounds.

(*b*) Five for writings calculated to arouse sectarian ill-feeling or religious animosity.

(*c*) Two for alarmist articles.

(*d*) Two for unjustifiable attacks on a Government servant and a ruling chief.

(*e*) Two warnings were administered to the same paper for its generally objectionable tone.

546. No action was taken under section 12 of the Indian Press Act.

547. The following action was taken under section 3 of Act XXV of 1867 :—

Warnings	8
Prosecutions	3

548. In one case, a printing press was warned for printing a pamphlet of an indecent character and two prosecutions were instituted for offences of a similar kind.

549. In four cases, the publishers were required to surrender for destruction all unsold copies of certain objectionable publications, while in two others some obscene and offensive passages were ordered to be deleted.

56.—Literary Societies.

[*Vide* pages 196 and 197 of the Administration Report for the year 1911-12.]

57.—Arts and Sciences.

Lahore Museum.

Visitors.

550. During the year 1917-18 the total number of visitors was 361,563 and the average daily attendance was 1,021 as against 357,481 and 1,013, respectively, in the previous year. There was considerable increase from 5,680 to 8,540 in the number of female visitors on the Zenana Day which is interesting as showing the growing tendency of women and girl students to study in the Museum.

INSTRUCTION.

Educational work of the Museum.

551. The usual course of lectures was delivered during the cold weather. The average attendance was 235 as against 153 in the previous year, showing the highest average on record.

Acquisitions.

552. The Museum acquired by gift, purchase and on loan important additions to its collections. The year now passed has had on the whole some features of special interest to the Museum world. The Museum was fortunate in acquiring the seven Greek Didrachms. All these coins are extremely rare. The Ornithology section has been strengthened by the gift of the remains of Colonel Tytler's well-known collection of birds' skins from all parts of the world. Another acquisition deserving of special interest is a Persian Manuscript "Punch Ganj" by the poet Nizami. Its caligraphy is very fine and the illustrations are good examples of the later period of Persian Art.

Loan collections.

553. Major-General R. H. Ewart, C.B., C.I.E., D.S.O., has lent his entire collection of German East African native arms, curiosities, etc., of which the most interesting thing is a large embroidered banner with German Imperial Coat of Arms, designed in black velvet and tinsel on a yellow ground. It was found by the British Troops at Dar-es-Slaam on occupation.

Finance.

554. The expenditure amounted to Rs. 9,897-4-7, as compared with Rs. 9,584-4-5 in the previous year.

CHAPTER VIII.

ARCHÆOLOGY.

Detailed information on the subject of this chapter will be found in the annual progress reports of the Superintendent, Hindu and Buddhist Monuments, Northern Circle, Lahore, and of the Superintendent, Muhammadan and British Monuments, Northern Circle, Agra, for the year ending 31st March 1918, and in the Administration Report of the Buildings and Roads Branch, Public Works Department, Punjab, for the year 1917-18.

58.—Archæology.

Hindu and Buddhist Monuments.

555. During the year under report, the sum of Rs. 8,423 was expended on the conservation of Hindu and Buddhist Monuments in the Province, of which Rs. 3,420 was devoted to annual repairs and the rest to works of special nature, which were as follows:—

Preliminary operations were carried out at the Malot Temple (Jhelum District). The ugly platform which had been built round the temple some years ago was dismantled, and it is gratifying to note that parts of the old basement of the temple have been found intact, so that it will be possible to rebuild it on the original plan. A scaffolding has been put up for the proper examination of the roof, and an estimate for further repairs will be prepared after inspection. At the Baijnath Temple (Kangra District) lime plaster was scraped off the stone carvings, and other minor repairs were carried out. The conservation work carried out at the Kangra Fort consisted of repairs to the arch of the main gateway and the wall adjoining it, and the construction of a dry stone paved path from the main gateway of the Fort to the temple inside it, and of a stone pavement in front of the main gateway. The repairs effected at the rock-cut temples at Masrur (Kangra District) embraced the underpinning of masonry, grouting of cracks in the structures, fitting the Hanuman image on the floor, construction of a new *tulasi*-stand, clearance of vegetation, excavation around the plinth of the temple, and stacking of images. Important conservation works were carried out at Taxila (Rawalpindi District) under the direct supervision of the Director-General of Archæology in India, and full particulars of these will be found in his annual report.

556. Other monuments were inspected during the year. They are the ancient site of Bhera, the Sabz Pind near Miani (Shahpur District) and the remains of Amb (Shahpur District) and Katas ((Jhelum District) in the Salt Range. Inspection and conservation notes on the monuments at the two last-mentioned places are under preparation. The existence is reported of three temples at Amb, though only two such structures have survived on the site. The conservation of these temples has continued for several years past, the cost of repairs being met year to year from the grant for annual repairs. A great deal more, however, remains to be done, and when funds are available, arrangements for repairs on more satisfactory lines will be made. The principal monuments at Katas are the well-known group of Satghara temples. Most of them are almost in ruins, but two seem to be in a good state of preservation, and when the modern plaster work is removed, it may be possible to restore them to their original form and style.

Muhammadan and British Monuments.

557. During the year a sum of Rs. 28,600 was expended in the province on the upkeep of Muhammadan and British Monuments; Rs. 11,000 of this sum was spent on non-recurring special repairs and the residue on maintenance.

558. In Lahore District extensive works were carried out in the Shalimar gardens where, besides other repairs, the enclosure wall had to be

underpinned substantially for nearly its whole length. The surroundings of the Akbari Sarai at Shahdara were improved by planting grass and removing an untidy cinder path.

559. A storm water drain is being constructed in front of Lahore Fort and, inside the Fort, the roof of the small Sikh pavilion over the Shish Mahal was strengthened by steel beams, which will be invisible.

560. In Gujranwala District a sum of Rs. 2,400 was spent on the Haran Munara and tank at Shaikhupura in re-building the southern portion of the tank, repairing the parapet and improving the drainage of the surrounding area.

561. A small sum was also spent in connection with the setting up of a memorial tablet and masonry pillar to commemorate the grave of Subedar Major Mir Sher Ali, Sardar Bahadur, of the 8th Light Cavalry, Bengal Native Army, who—then an old man of 78—fell in the battle of Ramanagar on the 22nd November 1848, fighting against the Sikhs.

562. In Rohtak and Jullundur Districts repairs were made to the *Kos Minars* (Mughal milestones) erected along certain of the main routes across India in the reign of Jahangir.

563. In Gurdaspur small repairs were carried out on the Takht-i-Akbari at Kalanaur—a monument which is of interest as the site of Akbar's Coronation prior to his return to the Capital in 1556 on receiving the news of the death of his father Humayun.

CHAPTER IX.

MISCELLANEOUS.

59.—Ecclesiastical Jurisdiction.

(For this section reference should be made to pages 201-207 of the Report for 1911-12.)

60.—Ecclesiastical.

564. Rupees 400 were contributed by Government towards the construction of the Lyallpur Church tower and a grant of Rs. 1,020 was sanctioned for re-building the wall and improving the grounds of the cemetery at Sirsa. Improvements were made in the pay of the establishments attached to the churches at Jhelum and Khewra and the cemeteries at Karnal, Solon, Subathu and Dagshai. The small church at Kalka, which had been built mainly with voluntary subscriptions, was taken over by Government to be maintained from Imperial Funds.

565. Sanction was accorded by the Government of India to the Bishop of Lahore and his domestic Chaplain attending the Episcopal Synod at Calcutta in February 1918. Two chaplains were placed at the disposal of the Government of India for service in Mesopotamia.

566. A conveyance allowance of Rs. 50 per mensem was sanctioned by the Government of India for the Church of Scotland Chaplain at Rawalpindi. The Ven'ble Archdeacon J. G. S. Syme was granted long leave to England and Canon H. T. Wheeler, Chaplain of Simla, was appointed to officiate as Archdeacon.

61.—Stationery.

567. The total value of stationery supplied during the year under report was Rs. 3,32,592 against an allotment of Rs. 3,35,890, showing a net saving of Rs. 3,298. The expenditure was distributed as follows :—

	Rs.
Offices other than Presses	87,159
Presses	2,45,433
Total ...	3,32,592

568. As compared with the preceding year there was an increase of Rs. 81,039 or a little over 24 per cent., due chiefly to the rise in the prices of all articles of stationery, particularly paper.

62.—Punjab Government Press.

569. Receipts from the sale of Gazettes and other Government publications were slightly greater than in 1916-17, but in other Press receipts there was a decrease of about Rs. 1,200. General expenditure, exclusive of the cost of printing paper and binding materials, was reduced by over Rs. 12,000. The total expenditure on contract printing was also about Rs. 7,000 less than in the previous year. These reductions are chiefly due to the standardization and stereotyping of certain departmental forms, reduction in size of paper wherever possible, and the adoption of cheaper methods of printing.

570. Rigid economy in paper and binding materials was practised during the year under report. The use of bleached and coloured papers was considerably curtailed and unbleached paper substituted wherever possible. Owing, however, to a rise of almost one hundred per cent. in the cost of paper and binding materials the expenditure under this head increased by over Rs. 40,000.

571. A new departure during the year was the use of jail-made paper for the manufacture of official envelopes and for other purposes in which mill-made paper was not absolutely essential. This paper was entirely manufactured by unskilled prison labour. Efforts are now being made by the Jail authorities to improve the quality and, if successful, future comsumption is likely to be increased.

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REPORT

ON THE

ADMINISTRATION

OF THE

PUNJAB AND ITS DEPENDENCIES

FOR

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